

BRISTOL DISTRICT DESIGN UNIT

PROJECT MANAGER James Jones, L.S. (276) 696-3257 (Bristol)  
SURVEYED BY, DATE Woolpert Inc., (757) 549-3549 (Nov. 24, 2019)  
DESIGN BY Tamara Pritchard, P.E. (276) 696-3249 (Bristol)  
SUBSURFACE UTILITY BY, DATE

FOR INDEX OF SHEETS SEE SHEET 1B

THIS PROJECT WAS DEVELOPED UTILIZING THE DEPARTMENT'S ENGINEERING  
DESIGN PACKAGE OPENROADS/GEOPAK.  
GEOPAK Computer Identification No. UPC 116156

COMMONWEALTH OF VIRGINIA  
DEPARTMENT OF TRANSPORTATION

PLAN AND PROFILE OF PROPOSED  
STATE HIGHWAY

WASHINGTON COUNTY  
I-81 NORTHBOUND TRUCK CLIMBING LANE  
FROM: MILE MARK 32.197  
TO: MILEMARK 33.519

| Description                    | Reference |
|--------------------------------|-----------|
| Mile Mark 32.197 I-81 NB       |           |
| Sta. 107+20 I-81 NB Constr. BL |           |

CONVENTIONAL SIGNS

|                              |  |
|------------------------------|--|
| STATE LINE                   |  |
| COUNTY LINE                  |  |
| CITY, TOWN OR VILLAGE        |  |
| RIGHT OF WAY LINE            |  |
| FENCE LINE                   |  |
| UNFENCED PROPERTY LINE       |  |
| FENCED PROPERTY LINE         |  |
| WATER LINE                   |  |
| SANITARY SEWER LINE          |  |
| GAS LINE                     |  |
| ELECTRIC UNDERGROUND CABLE   |  |
| TRAVELED WAY                 |  |
| GUARD RAIL                   |  |
| RETAINING WALL               |  |
| RAILROADS                    |  |
| BASE OR SURVEY LINE          |  |
| LEVEE OR EMBANKMENT          |  |
| BRIDGES                      |  |
| CULVERTS                     |  |
| DROP INLET                   |  |
| POWER POLES                  |  |
| TELEPHONE OR TELEGRAPH POLES |  |
| TELEPHONE OR TELEGRAPH LINES |  |
| HEDGE                        |  |
| TREES                        |  |
| HEAVY WOODS                  |  |
| GROUND ELEVATION             |  |
| GRADE ELEVATION              |  |

THE COMPLETE ELECTRONIC PDF VERSION OF THE PLAN ASSEMBLY AS AWARDED, HAS BEEN SEALED AND SIGNED USING DIGITAL SIGNATURES AND THE OFFICIAL PLAN ASSEMBLY IN ELECTRONIC FORMAT IS STORED IN THE VDOT CENTRAL OFFICE PLAN LIBRARY, INCLUDING ALL SUBSEQUENT REVISIONS, WILL BE THE OFFICIAL CONSTRUCTION PLANS. FOR INFORMATION RELATIVE TO ELECTRONIC FILES AND LAYERED PLANS, SEE THE GENERAL NOTES.

DESIGN FEATURES RELATING TO CONSTRUCTION OR TO REGULATION AND CONTROL OF TRAFFIC MAY BE SUBJECT TO CHANGE AS DEEMED NECESSARY BY THE DEPARTMENT.

THIS PROJECT IS TO BE CONSTRUCTED IN ACCORDANCE WITH THE DEPARTMENT'S 2020 ROAD AND BRIDGE SPECIFICATIONS, 2016 ROAD AND BRIDGE STANDARDS, 2009 MUTCD, 2011 VIRGINIA SUPPLEMENT TO THE MUTCD, 2011 VIRGINIA WORK AREA PROTECTION MANUAL AND AS AMENDED BY CONTRACT PROVISIONS AND THE COMPLETE ELECTRONIC PDF VERSION OF THE PLAN ASSEMBLY.

ALL CURVES ARE TO BE SUPERELEVATED, TRANSITIONED AND WIDENED IN ACCORDANCE WITH STANDARD TC-5.11, EXCEPT WHERE OTHERWISE NOTED.

THE ORIGINAL APPROVED TITLE SHEET(S), INCLUDING ORIGINAL SIGNATURES, ARE FILED IN THE VDOT CENTRAL OFFICE PLAN LIBRARY. ANY MISUSE OF ELECTRONIC FILES, INCLUDING SCANNED SIGNATURES, IS ILLEGAL AND ENFORCED TO THE FULL EXTENT OF THE LAW.

Washington County Population 54,402 (2018 Census)

| STATE PROJECT NO. | SECTION | FEDERAL AID PROJECT NO. | TYPE CODE | UPC NO. | EQUALITIES | LENGTH INCLUDING BRIDGE(S) |       | LENGTH EXCLUDING BRIDGE(S) |       | TYPE PROJECT  | DESCRIPTION                                  |
|-------------------|---------|-------------------------|-----------|---------|------------|----------------------------|-------|----------------------------|-------|---------------|--|
|                   |         |                         |           |         | FEET       | FEET                       | MILES | FEET                       | MILES |               |  |
| 0081-095-829      | PE-101  | NHPP-081-1 (362)        |           | 116156  |            | 6,980.00                   | 1.322 | 6,980.00                   | 1.322 | PRELIM. ENGR. | Fr: MILE MARK 32.197<br>To: MILE MARK 33.519 |
|                   | RW- 201 |                         |           | 116156  |            | 5,048.30                   | 0.956 | 5,048.30                   | 0.956 | RIGHT OF WAY  | Fr: MILE MARK 32.428<br>To: MILE MARK 33.384 |
|                   | C-501   |                         | 1000      | 116156  |            | 5,400.00                   | 1.023 | 5,400.00                   | 1.023 | CONSTR.       | Fr: MILE MARK 32.402<br>To: MILE MARK 33.425 |

Project Lengths are based on I-81 NBL Construction Baseline.

FHWA-534 DATA 11103  
UPC NO. 116156

LIMITED ACCESS HIGHWAY By Resolution of Highway Commission dated October 4, 1956

| STATE | FEDERAL AID  | STATE |  | SHEET NO. |
|-------|--|-------|--|-----------|
|       | PROJECT  | ROUTE | PROJECT  |           |
| V.A.  | NHPP-081-1 ( )<br>(SEE TABULATION BELOW FOR SECTION NUMBERS) | 81    | (FO) 0081-095-829, PE-101, RW-201, C-501<br>(SEE TABULATION BELOW FOR SECTION NUMBERS) | 1         |

FUNCTIONAL CLASSIFICATION AND TRAFFIC DATA

SB I-81 - (GS-INT) INTERSTATE - ROLLING - 75 MPH MIN. DESIGN SPEED

DESIGN VEHICLE - WB-67

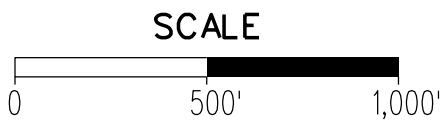
|                     |  |
|---------------------|--|
|                     | Fr: MILE MARK 32.197<br>To: MILE MARK 33.519                               |
| ADT (2018)          | 16,040   |
| ADT (2045)          | 21,404   |
| DHV                 | 1,170  |
| D (%) (design hour) |  |
| T (%) (design hour) | 17%  |
| V (MPH)             | See Plan and Profile Sheets for Horizontal and Vertical Curve Design Speed |

EXCEPTIONS TO MAINLINE DESIGN SPEED

| Sta. To Sta.           | Design Speed (mph) | Reasons for Exception | Approval Date |
|------------------------|--------------------|-----------------------|---------------|
| 157+94.00              | 60                 | Vertical Curve Radius |               |
| 118+00.00 to 129+00.00 |                    | Superelevation Rate   |               |

PH PLANS

THESE PLANS ARE UNFINISHED AND UNAPPROVED AND ARE NOT TO BE USED FOR ANY TYPE OF CONSTRUCTION OR THE ACQUISITION OF RIGHT OF WAY.



TIER 2 PROJECT

|   |
|---|
| RECOMMENDED FOR APPROVAL FOR RIGHT OF WAY ACQUISITION |
| INFRASTRUCTURE INVESTMENT DIRECTOR                    |
| STATE LOCATION AND DESIGN ENGINEER                    |
| CHIEF FINANCIAL OFFICER                               |
| CHIEF ENGINEER  |

|                                       |
|---------------------------------------|
| APPROVED FOR RIGHT OF WAY ACQUISITION |
| CHIEF OF POLICY                       |

|   |
|---|
| RECOMMENDED FOR APPROVAL FOR CONSTRUCTION |
| INFRASTRUCTURE INVESTMENT DIRECTOR        |
| STATE LOCATION AND DESIGN ENGINEER        |
| STATE STRUCTURE AND BRIDGE ENGINEER       |
| CHIEF FINANCIAL OFFICER                   |

|                           |
|---------------------------|
| APPROVED FOR CONSTRUCTION |
| CHIEF ENGINEER            |

|   |
|---|
| APPROVED  |
| DIVISION ADMINISTRATOR<br>FEDERAL HIGHWAY ADMINISTRATION<br>U.S. DEPARTMENT OF TRANSPORTATION |

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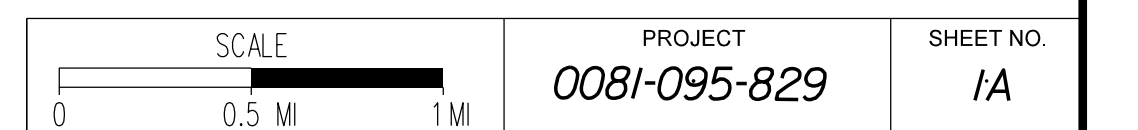
# INTERSTATE 81 NBL LOCATION MAP

THESE PLANS ARE UNFINISHED  
AND UNAPPROVED AND ARE NOT  
TO BE USED FOR ANY TYPE  
OF CONSTRUCTION OR THE  
ACQUISITION OF RIGHT OF WAY.

This map shows the Glade Spring area in Monroe County, North Carolina. The Glade Spring community is highlighted in gray. The map includes the following details:

- Counties:** Walker, Jefferson, Monroe, Taylor, and Swain.
- Rivers:** Holston River, Middle Fork Holston River, and Back Fork.
- Communities and Landmarks:** Glade Spring, Old Glade Spring, Blacksburg, Emory, Meadowview, Cedarville, Greenfield, Snodgrass, Lodi, Friendship, DeBusk Mill, Loves Mill, Mill Cr, and Back.
- Roads:** US-80, US-11, US-91, and various local roads (e.g., 740, 742, 743, 744, 745, 746, 748, 750, 751, 753, 755, 756, 757, 758, 759, 760, 761, 762, 763, 764, 765, 766, 767, 768, 769, 770, 771, 772, 773, 774, 775, 776, 777, 778, 779, 780, 781, 782, 783, 784, 785, 786, 787, 788, 789, 790, 791, 792, 793, 794, 795, 796, 797, 798, 799, 800, 801, 802, 803, 804, 805, 806, 807, 808, 809, 810, 811, 812, 813, 814, 815, 816, 817, 818, 819, 820, 821, 822, 823, 824, 825, 826, 827, 828, 829, 830, 831, 832, 833, 834, 835, 836, 837, 838, 839, 840, 841, 842, 843, 844, 845, 846, 847, 848, 849, 850, 851, 852, 853, 854, 855, 856, 857, 858, 859, 860, 861, 862, 863, 864, 865, 866, 867, 868, 869, 870, 871, 872, 873, 874, 875, 876, 877, 878, 879, 880, 881, 882, 883, 884, 885, 886, 887, 888, 889, 890, 891, 892, 893, 894, 895, 896, 897, 898, 899, 900, 901, 902, 903, 904, 905, 906, 907, 908, 909, 910, 911, 912, 913, 914, 915, 916, 917, 918, 919, 920, 921, 922, 923, 924, 925, 926, 927, 928, 929, 930, 931, 932, 933, 934, 935, 936, 937, 938, 939, 940, 941, 942, 943, 944, 945, 946, 947, 948, 949, 950, 951, 952, 953, 954, 955, 956, 957, 958, 959, 960, 961, 962, 963, 964, 965, 966, 967, 968, 969, 970, 971, 972, 973, 974, 975, 976, 977, 978, 979, 980, 981, 982, 983, 984, 985, 986, 987, 988, 989, 990, 991, 992, 993, 994, 995, 996, 997, 998, 999, 1000).
- Distances:** Various distances are marked along the roads, such as 1.49, 1.32, 1.17, 1.60, 1.03, 1.23, 1.05, 1.06, 1.07, 1.08, 1.09, 1.10, 1.11, 1.12, 1.13, 1.14, 1.15, 1.16, 1.17, 1.18, 1.19, 1.20, 1.21, 1.22, 1.23, 1.24, 1.25, 1.26, 1.27, 1.28, 1.29, 1.30, 1.31, 1.32, 1.33, 1.34, 1.35, 1.36, 1.37, 1.38, 1.39, 1.40, 1.41, 1.42, 1.43, 1.44, 1.45, 1.46, 1.47, 1.48, 1.49, 1.50, 1.51, 1.52, 1.53, 1.54, 1.55, 1.56, 1.57, 1.58, 1.59, 1.60, 1.61, 1.62, 1.63, 1.64, 1.65, 1.66, 1.67, 1.68, 1.69, 1.70, 1.71, 1.72, 1.73, 1.74, 1.75, 1.76, 1.77, 1.78, 1.79, 1.80, 1.81, 1.82, 1.83, 1.84, 1.85, 1.86, 1.87, 1.88, 1.89, 1.90, 1.91, 1.92, 1.93, 1.94, 1.95, 1.96, 1.97, 1.98, 1.99, 2.00, 2.01, 2.02, 2.03, 2.04, 2.05, 2.06, 2.07, 2.08, 2.09, 2.10, 2.11, 2.12, 2.13, 2.14, 2.15, 2.16, 2.17, 2.18, 2.19, 2.20, 2.21, 2.22, 2.23, 2.24, 2.25, 2.26, 2.27, 2.28, 2.29, 2.30, 2.31, 2.32, 2.33, 2.34, 2.35, 2.36, 2.37, 2.38, 2.39, 2.40, 2.41, 2.42, 2.43, 2.44, 2.45, 2.46, 2.47, 2.48, 2.49, 2.50, 2.51, 2.52, 2.53, 2.54, 2.55, 2.56, 2.57, 2.58, 2.59, 2.60, 2.61, 2.62, 2.63, 2.64, 2.65, 2.66, 2.67, 2.68, 2.69, 2.70, 2.71, 2.72, 2.73, 2.74, 2.75, 2.76, 2.77, 2.78, 2.79, 2.80, 2.81, 2.82, 2.83, 2.84, 2.85, 2.86, 2.87, 2.88, 2.89, 2.90, 2.91, 2.92, 2.93, 2.94, 2.95, 2.96, 2.97, 2.98, 2.99, 3.00).
- Other Features:** The map includes a legend for the Glade Spring community, a scale bar, and a north arrow.

WASHINGTON COUNTY



PROJECT MANAGER *James Jones, L.S. (276) 696-3257 (Bristol)* .....  
SURVEYED BY, DATE *Woodpeck Inc., (757) 549-3549 (Nov. 24, 2019)* .....  
DESIGN BY *Tamara Pritchard, P.E. (276) 696-3249 (Bristol)* .....  
SUBSURFACE UTILITY BY, DATE *Woodpeck Inc., (757) 549-3549 (Nov. 24, 2019)* ..

| REVISED | STATE | ROUTE | STATE<br>PROJECT                       | SHEET NO. |
|---------|-------|-------|--|-----------|
|         | VA.   | 81    | 0081-095-829, PE-101,<br>RW-201, C-501 | 1B        |

DESIGN FEATURES RELATING TO CONSTRUCTION  
OR TO REGULATION AND CONTROL OF TRAFFIC  
MAY BE SUBJECT TO CHANGE AS DEEMED  
NECESSARY BY THE DEPARTMENT

# INDEX OF SHEETS

| SHEET NO.    | DESCRIPTION                                      |
|--------------|--|
| 1            | TITLE SHEET                                      |
| 1A           | LOCATION MAP                                     |
| 1B           | INDEX OF SHEETS                                  |
| 1C           | RIGHT OF WAY DATA SHEET                          |
| 1D           | REVISION DATA SHEET                              |
| 1F(1)-1F(21) | SURVEY ALIGNMENT DATA SHEET                      |
| 1G           | CONSTRUCTION ALIGNMENT DATA SHEET                |
| 1J(1)-1J(17) | TRANSPORTATION MANAGEMENT PLAN                   |
| 2            | GENERAL NOTES                                    |
| 2A(1)        | TYPICAL SECTIONS                                 |
| 2B(1) -2B(4) | STORMWATER POLLUTION PREVENTION PLANS            |
| 2K(1)        | SEDIMENT TRAP DETAIL                             |
| 3            | PLAN STA.102+00.00 TO STA.112+50.00              |
| 4            | PLAN STA.112+50.00 TO STA.124+50.00              |
| 4A           | PROFILE STA.118+00.00 TO STA.124+50.00           |
| 4B           | EROSION & SEDIMENT CONTROL PLAN - PHASE I        |
| 4C           | EROSION & SEDIMENT CONTROL PLAN - PHASE II       |
| 4RW          | RIGHT OF WAY PLAN STA.118+00.00 TO STA.124+50.00 |
| 5            | PLAN STA.124+25.00 TO STA.137+50.00              |
| 5A           | PROFILE STA.124+25.00 TO STA.137+50.00           |
| 5B           | EROSION & SEDIMENT CONTROL PLAN - PHASE I        |
| 5C           | EROSION & SEDIMENT CONTROL PLAN - PHASE II       |
| 5RW          | RIGHT OF WAY PLAN STA.124+25.00 TO STA.137+50.00 |
| 6            | PLAN STA.137+50.00 TO STA.150+50.00              |
| 6A           | PROFILE STA.137+50.00 TO STA.150+50.00           |
| 6B           | EROSION & SEDIMENT CONTROL PLAN - PHASE I        |
| 6C           | EROSION & SEDIMENT CONTROL PLAN - PHASE II       |
| 6RW          | RIGHT OF WAY PLAN STA.137+50.00 TO STA.150+50.00 |
| 7            | PLAN STA.150+50.00 TO STA.163+50.00              |
| 7A           | PROFILE STA.150+50.00 TO STA.163+50.00           |
| 7B           | EROSION & SEDIMENT CONTROL PLAN - PHASE I        |
| 7C           | EROSION & SEDIMENT CONTROL PLAN - PHASE II       |
| 8            | PLAN STA.163+50.00 TO STA.172+00.00              |
| 8A           | PROFILE STA.163+50.00 TO STA.172+00.00           |
| 8B           | EROSION & SEDIMENT CONTROL PLAN - PHASE I        |
| 8C           | EROSION & SEDIMENT CONTROL PLAN - PHASE II       |
| 8RW          | RIGHT OF WAY PLAN STA.163+50.00 TO STA.172+00.00 |

TOTAL CROSS SECTION SHEETS 36 (SEE CROSS SECTION SHEET NUMBER 1 FOR INDEX OF SHEETS)

PH PLANS

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TO BE USED FOR ANY TYPE  
OF CONSTRUCTION OR THE  
ACQUISITION OF RIGHT OF WAY.

|  |                         |                 |
|--|-------------------------|-----------------|
|  | PROJECT<br>0081-095-829 | SHEET NO.<br>1B |
|--|-------------------------|-----------------|

PROJECT MANAGER James Jones, L.S. (276) 696-3257 (Bristol)  
SURVEYED BY, DATE Woolpert Inc. (757) 549-3549 (Nov. 24, 2019)  
DESIGN BY Tamara Pritchard, P.E. (276) 696-3249 (Bristol)  
SUBSURFACE UTILITY BY, DATE Woolpert Inc. (757) 549-3549 (Nov. 24, 2019)

PRELIMINARY  
RIGHT OF WAY DATA SHEET

PH PLANS

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| REVISED |  | STATE |                                     | SHEET NO. |
|---------|--|-------|-------------------------------------|-----------|
|         |  | ROUTE | PROJECT                             |           |
|         |  | VA.   | 0081-095-829, PE-101, RW-201, C-501 | IC        |

DESIGN FEATURES RELATING TO CONSTRUCTION  
OR TO REGULATION AND CONTROL OF TRAFFIC  
MAY BE SUBJECT TO CHANGE AS DEEMED  
NECESSARY BY THE DEPARTMENT

City/County: Washington

UPC No.: 116156

[illegible]

|                                |                        |
|--------------------------------|------------------------|
| PROJECT<br><i>0081-095-829</i> | SHEET NO.<br><i>1C</i> |
|--------------------------------|------------------------|

BRISTOL DISTRICT DESIGN UNIT



PROJECT MANAGER Jim Jones, L.S.(276)696-3257 (Bristol) -----  
SURVEYED BY, DATE Woolpert, Inc. (757) 549-3549 (Nov. 24, 2019) -----  
DESIGN BY Tamara Pritchard, P.E. (276) 696-3249 (Bristol) -----  
SUBSURFACE UTILITY BY, DATE Woolpert, Inc. (757) 549-3549 (Nov. 24, 2019).

REVISION DATA SHEET

PH PLANS

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ACQUISITION OF RIGHT OF WAY.

| REVISED | STATE | ROUTE | STATE<br>PROJECT                       | SHEET NO. |
|---------|-------|-------|--|-----------|
|         | VA.   | 81    | 0081-095-829, PE-101,<br>RW-201, C-501 | ID        |

State Project: 0081-095-829, PE-101, RW-201, C-501  
Federal Project: NHPP-081-II(362)  
From: MILE MARK 32.197  
To: MILE MARK 33.519  
UPC Number: 116156

DESIGN FEATURES RELATING TO CONSTRUCTION  
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DESIGN BY Tamara Pritchard, P.E. (276) 696-3249 (Bristol)  
SUBSURFACE UTILITY BY, DATE Woolpert, Inc. (757) 549-3549 (Nov. 24, 2019)

LD-200 (REV. 10/2014)

Virginia Department of Transportation Horizontal Control

Control Station I.D. : 901      Date : 11-19-2019

VDOT Project Coordinates (2014)

East (X) : N/A ft.  
North (Y) : N/A ft.  
Ortho. Elevation (H) : 974.7 ft.  
Elevation : N/A ft.

VA State Plane Coordinates : NAD 83- U.S. Survey Feet  
East (X) : 10534670.036 ft.  
North (Y) : 3460249.009 ft.  
Ortho. Elevation (H) : 974.7 ft.  
Zone : North = South X (place an "X" beside one)

Project Specific Combined Scale Factor: 1.000000000 (9 Decimal Places)

Project Information  
Project Number : PE12-961-188, P101  
Route : I-81 (NBL) City/County : Washington  
Established By : Woolpert

Latitude : 36° 46' 53.7774" N (5 Decimal Places)  
Longitude : 81° 44' 18.45225" W (5 Decimal Places)  
Geoid Separation (N) : -101.482  
Ellipsoid Height (h) : 1872.69  
Horizontal Datum : NAD83      Year : 2011-2010.00  
Vertical Datum : NAVD88      Geoid : 12B  
Azimuth to Station : 902 Is 68° 44' 50"  
Control Based On: OPUS Project  
CORS Stations VABG, WVAT, LS04, NCSR

To convert Virginia State Plane Coordinates to VDOT Project Coordinates, use the following formula :  
• Multiply the Easting And Northing Values (For Both Zones) by the Project Specific Combined Scale Factor. ( Located above left )  
• Reverse this Procedure to convert VDOT Project Coordinates (2014) to NAD 83 - U.S. Survey Feet

DETAILED SKETCH (Not to Scale)

Station Is A Pin W/Cap Set Flush With The Ground Approx. 0.2 mi. West From Overpass Of Fleet Rd. & I-81. Station Is 0.3' South From Edge Of Pavement, 83.6' Southwest From Mile Marker 31.8, 6.9' Northwest From Retaining Wall.

LD-200 (REV. 10/2014)

LD-200 (REV. 10/2014)

Virginia Department of Transportation Horizontal Control

Control Station I.D. : 902      Date : 11-19-2019

VDOT Project Coordinates (2014)

East (X) : N/A ft.  
North (Y) : N/A ft.  
Ortho. Elevation (H) : 967.03 ft.  
Elevation : N/A ft.

VA State Plane Coordinates : NAD 83- U.S. Survey Feet  
East (X) : 10535245.787 ft.  
North (Y) : 3460472.938 ft.  
Ortho. Elevation (H) : 967.03 ft.  
Zone : North = South X (place an "X" beside one)

Project Specific Combined Scale Factor: 1.000000000 (9 Decimal Places)

Project Information  
Project Number : PE12-961-188, P101  
Route : I-81 (NBL) City/County : Washington  
Established By : Woolpert

Latitude : 36° 46' 55.57980" N (5 Decimal Places)  
Longitude : 81° 44' 11.47343" W (5 Decimal Places)  
Geoid Separation (N) : -101.48  
Ellipsoid Height (h) : 1865.549  
Horizontal Datum : NAD83      Year : 2011-2010.00  
Vertical Datum : NAVD88      Geoid : 12B  
Azimuth to Station : 901 Is 248° 44' 50"  
Control Based On: OPUS Project  
CORS Stations VABG, WVAT, LS04, NCSR

To convert Virginia State Plane Coordinates to VDOT Project Coordinates, use the following formula :  
• Multiply the Easting And Northing Values (For Both Zones) by the Project Specific Combined Scale Factor. ( Located above left )  
• Reverse this Procedure to convert VDOT Project Coordinates (2014) to NAD 83 - U.S. Survey Feet

DETAILED SKETCH (Not to Scale)

Station Is A Pin W/Cap Set Flush With The Ground Approx. 0.1 mi. West From Overpass Of Fleet Rd. & I-81. Station Is 7.1' South From Edge Of Pavement, 84.7' Southwest From Mile Marker 32, 21.0' North From Edge Of Pavement.

LD-200 (REV. 10/2014)

LD-200 (REV. 10/2014)

Virginia Department of Transportation Horizontal Control

Control Station I.D. : 903      Date : 11-19-2019

VDOT Project Coordinates (2014)

East (X) : N/A ft.  
North (Y) : N/A ft.  
Ortho. Elevation (H) : 2028.01 ft.  
Elevation : N/A ft.

VA State Plane Coordinates : NAD 83- U.S. Survey Feet  
East (X) : 10538542.760 ft.  
North (Y) : 3461979.205 ft.  
Ortho. Elevation (H) : 2028.01 ft.  
Zone : North = South X (place an "X" beside one)

Project Specific Combined Scale Factor: 1.000000000 (9 Decimal Places)

Project Information  
Project Number : PE12-961-188, P101  
Route : I-81 (NBL) City/County : Washington  
Established By : Woolpert

Latitude : 36° 47' 11.58028" N (5 Decimal Places)  
Longitude : 81° 43' 31.60173" W (5 Decimal Places)  
Geoid Separation (N) : -101.47  
Ellipsoid Height (h) : 1926.532  
Horizontal Datum : NAD83      Year : 2011-2010.00  
Vertical Datum : NAVD88      Geoid : 12B  
Azimuth to Station : 904 Is 60° 57' 14"  
Control Based On: OPUS Project  
CORS Stations VABG, WVAT, LS04, NCSR

To convert Virginia State Plane Coordinates to VDOT Project Coordinates, use the following formula :  
• Multiply the Easting And Northing Values (For Both Zones) by the Project Specific Combined Scale Factor. ( Located above left )  
• Reverse this Procedure to convert VDOT Project Coordinates (2014) to NAD 83 - U.S. Survey Feet

DETAILED SKETCH (Not to Scale)

Station Is A Pin W/Cap Set Flush With The Ground Approx. 0.6 mi. East From Overpass Of Fleet Rd. & I-81. Station Is 5.3' South From Edge Of Pavement, 24.7' Southwest From End Of Guardrail, 23.6' West From Culvert Sign.

LD-200 (REV. 10/2014)

LD-200 (REV. 10/2014)

Virginia Department of Transportation Horizontal Control

Control Station I.D. : 904      Date : 11-19-2019

VDOT Project Coordinates (2014)

East (X) : N/A ft.  
North (Y) : N/A ft.  
Ortho. Elevation (H) : 2047.10 ft.  
Elevation : N/A ft.

VA State Plane Coordinates : NAD 83- U.S. Survey Feet  
East (X) : 10539140.939 ft.  
North (Y) : 3462074.441 ft.  
Ortho. Elevation (H) : 2047.10 ft.  
Zone : North = South X (place an "X" beside one)

Project Specific Combined Scale Factor: 1.000000000 (9 Decimal Places)

Project Information  
Project Number : PE12-961-188, P101  
Route : I-81 (NBL) City/County : Washington  
Established By : Woolpert

Latitude : 36° 47' 12.72339" N (5 Decimal Places)  
Longitude : 81° 43' 24.29247" W (5 Decimal Places)  
Geoid Separation (N) : -101.47  
Ellipsoid Height (h) : 1945.63  
Horizontal Datum : NAD83      Year : 2011-2010.00  
Vertical Datum : NAVD88      Geoid : 12B  
Azimuth to Station : 903 Is 260° 57' 14"  
Control Based On: OPUS Project  
CORS Stations VABG, WVAT, LS04, NCSR

To convert Virginia State Plane Coordinates to VDOT Project Coordinates, use the following formula :  
• Multiply the Easting And Northing Values (For Both Zones) by the Project Specific Combined Scale Factor. ( Located above left )  
• Reverse this Procedure to convert VDOT Project Coordinates (2014) to NAD 83 - U.S. Survey Feet

DETAILED SKETCH (Not to Scale)

Station Is A Pin W/Cap Set Flush With The Ground Approx. 0.8 mi. East From Overpass Of Fleet Rd. & I-81. Station Is 164.4' East From Mile Marker 32.7, 4.8' South Of Guardrail, 85.4' East From Culvert.

LD-200 (REV. 10/2014)

LD-200 (REV. 10/2014)

Virginia Department of Transportation Horizontal Control

Control Station I.D. : 905      Date : 11-19-2019

VDOT Project Coordinates (2014)

East (X) : N/A ft.  
North (Y) : N/A ft.  
Ortho. Elevation (H) : 2086.52 ft.  
Elevation : N/A ft.

VA State Plane Coordinates : NAD 83- U.S. Survey Feet  
East (X) : 10542689.740 ft.  
North (Y) : 3462560.641 ft.  
Ortho. Elevation (H) : 2086.52 ft.  
Zone : North = South X (place an "X" beside one)

Project Specific Combined Scale Factor: 1.000000000 (9 Decimal Places)

Project Information  
Project Number : PE12-961-188, P101  
Route : I-81 (NBL) City/County : Washington  
Established By : Woolpert

Latitude : 36° 47' 18.72372" N (5 Decimal Places)  
Longitude : 81° 42' 40.89482" W (5 Decimal Places)  
Geoid Separation (N) : -101.47  
Ellipsoid Height (h) : 1985.05  
Horizontal Datum : NAD83      Year : 2011-2010.00  
Vertical Datum : NAVD88      Geoid : 12B  
Azimuth to Station : 906 Is 100° 05' 28"  
Control Based On: OPUS Project  
CORS Stations VABG, WVAT, LS04, NCSR

To convert Virginia State Plane Coordinates to VDOT Project Coordinates, use the following formula :  
• Multiply the Easting And Northing Values (For Both Zones) by the Project Specific Combined Scale Factor. ( Located above left )  
• Reverse this Procedure to convert VDOT Project Coordinates (2014) to NAD 83 - U.S. Survey Feet

DETAILED SKETCH (Not to Scale)

Station Is A Pin W/Cap Set Flush With The Ground Approx. 1.4 mi. East From Overpass Of Fleet Rd. & I-81. Station Is 55.7' East From Mile Marker 33.4, 1.4' South From Edge Of Pavement, 3.0' North From Top Of Bank.

LD-200 (REV. 10/2014)

LD-200 (REV. 10/2014)

Virginia Department of Transportation Horizontal Control

Control Station I.D. : 906      Date : 11-19-2019

VDOT Project Coordinates (2014)

East (X) : N/A ft.  
North (Y) : N/A ft.  
Ortho. Elevation (H) : 2062.87 ft.  
Elevation : N/A ft.

VA State Plane Coordinates : NAD 83- U.S. Survey Feet  
East (X) : 10543333.801 ft.  
North (Y) : 3462523.908 ft.  
Ortho. Elevation (H) : 2062.87 ft.  
Zone : North = South X (place an "X" beside one)

Project Specific Combined Scale Factor: 1.000000000 (9 Decimal Places)

Project Information  
Project Number : PE12-961-188, P101  
Route : I-81 (NBL) City/County : Washington  
Established By : Woolpert

Latitude : 36° 47' 18.57724" N (5 Decimal Places)  
Longitude : 81° 42' 32.96629" W (5 Decimal Places)  
Geoid Separation (N) : -101.47  
Ellipsoid Height (h) : 1961.40  
Horizontal Datum : NAD83      Year : 2011-2010.00  
Vertical Datum : NAVD88      Geoid : 12B  
Azimuth to Station : 905 Is 280° 05' 28"  
Control Based On: OPUS Project  
CORS Stations VABG, WVAT, LS04, NCSR

To convert Virginia State Plane Coordinates to VDOT Project Coordinates, use the following formula :  
• Multiply the Easting And Northing Values (For Both Zones) by the Project Specific Combined Scale Factor. ( Located above left )  
• Reverse this Procedure to convert VDOT Project Coordinates (2014) to NAD 83 - U.S. Survey Feet

DETAILED SKETCH (Not to Scale)

Station Is A Pin W/Cap Set Flush With The Ground Approx. 1.6 mi. East From Overpass Of Fleet Rd. & I-81. Station Is 67.2' East From End Of Guardrail, 3.8' South From Edge Of Pavement, 47.1' North From R/W Fence.

LD-200 (REV. 10/2014)

|                        |       |   |                                     |
|------------------------|-------|---|-------------------------------------|
| LIMITED ACCESS HIGHWAY |       | By Resolution of Highway Commission dated October 4, 1956 |                                     |
| REVISED                | STATE | ROUTE   | PROJECT                             |
|                        | VA.   | 81  | 0081-095-829, PE-101, RW-201, C-501 |
|                        |       |   | SHEET NO. IF(1)                     |

DESIGN FEATURES RELATING TO CONSTRUCTION OR TO REGULATION AND CONTROL OF TRAFFIC MAY BE SUBJECT TO CHANGE AS DEEMED NECESSARY BY THE DEPARTMENT

PH PLANS

THESE PLANS ARE UNFINISHED AND UNAPPROVED AND ARE NOT TO BE USED FOR ANY TYPE OF CONSTRUCTION OR THE ACQUISITION OF RIGHT OF WAY.

|         |              |           |       |
|---------|--------------|-----------|-------|
| PROJECT | 0081-095-829 | SHEET NO. | IF(1) |
|---------|--------------|-----------|-------|

PROJECT MANAGER James Jones, L.S.(276) 696-3257 (Bristol)  
SURVEYED BY, DATE Woolpert, Inc.(757) 549-3549 (Nov. 24, 2019)  
DESIGN BY Tamara Pritchard, P.E.(276) 696-3249 (Bristol)  
SUBSURFACE UTILITY BY, DATE Woolpert, Inc.(757) 549-3549 (Nov. 24, 2019)

SURVEY ALIGNMENT DATA SHEET

LD-200 (REV. 10/2014)

Virginia Department of Transportation Horizontal Control

Control Station I.D. : 907      Date : 11-19-2019

VDOT Project Coordinates (2014)

East (X) : N/A ft.  
North (Y) : N/A ft.  
Elevation : N/A ft.

VA State Plane Coordinates : NAD 83- U.S. Survey Feet

East (X) : 10546177.700 ft.  
North (Y) : 3461492.945 ft.  
Ortho. Elevation (H) : 1963.13 ft.  
Zone : North = South X (place an "X" beside one)

Project Specific Combined Scale

Factor: 1.000000000 (9 Decimal Places)

Latitude : 36° 47' 09.3434" N (5 Decimal Places)  
Longitude : 81° 41' 57.5955" W (5 Decimal Places)  
Geoid Separation (N) : 101.48  
Ellipsoid Height (h) : 186166  
Horizontal Datum : NAD83      Year : 2011-2010.00  
Vertical Datum : NAVD88      Geoid : 12B  
Azimuth to Station : 90B Is 100° 34' 50"  
Control Based On: OPUS Project  
CORS Stations VABG,WVAT,LS04,NCSR

Project Information

Project Number : PE12-961-188, P101  
Route : I-81(NBL)      City/County : Washington  
Established By : Woolpert

To convert Virginia State Plane Coordinates to VDOT Project Coordinates, use the following formula :

• Multiply the Easting And Northing Values (For Both Zones) by the Project Specific Combined Scale Factor.  
( Located above left )

• Reverse this Procedure to convert VDOT Project Coordinates (2014) to NAD 83 - U.S. Survey Feet

DETAILED SKETCH (Not to Scale)

Station Is A Pin W/Cap Set Flush With The Ground Approx. 1.3 mi. West From Overpass Of Route 107 & I-81. Station Is 45.7' East From Mile Marker 341, 6.3' South From Edge Of Pavement, 19.6' Northeast From A Sign.

LD-200 (REV. 10/2014)

LD-200 (REV. 10/2014)

Virginia Department of Transportation Horizontal Control

Control Station I.D. : 908      Date : 11-19-2019

VDOT Project Coordinates (2014)

East (X) : N/A ft.  
North (Y) : N/A ft.  
Elevation : N/A ft.

VA State Plane Coordinates : NAD 83- U.S. Survey Feet

East (X) : 10546847.910 ft.  
North (Y) : 3461367.254 ft.  
Ortho. Elevation (H) : 1958.23 ft.  
Zone : North = South X (place an "X" beside one)

Project Specific Combined Scale

Factor: 1.000000000 (9 Decimal Places)

Latitude : 36° 47' 08.33072" N (5 Decimal Places)  
Longitude : 81° 41' 49.30919" W (5 Decimal Places)  
Geoid Separation (N) : 101.48  
Ellipsoid Height (h) : 185675  
Horizontal Datum : NAD83      Year : 2011-2010.00  
Vertical Datum : NAVD88      Geoid : 12B  
Azimuth to Station : 90T Is 280° 34' 50"  
Control Based On: OPUS Project  
CORS Stations VABG,WVAT,LS04,NCSR

Project Information

Project Number : PE12-961-188, P101  
Route : I-81(NBL)      City/County : Washington  
Established By : Woolpert

To convert Virginia State Plane Coordinates to VDOT Project Coordinates, use the following formula :

• Multiply the Easting And Northing Values (For Both Zones) by the Project Specific Combined Scale Factor.  
( Located above left )

• Reverse this Procedure to convert VDOT Project Coordinates (2014) to NAD 83 - U.S. Survey Feet

DETAILED SKETCH (Not to Scale)

Station Is A Pin W/Cap Set Flush With The Ground Approx. 1.2 mi. West From Overpass Of Route 107 & I-81. Station Is 49.4' East From A Sign, 8.8' South From Edge Of Pavement, 12.0' North From End Of Guardrail.

LD-200 (REV. 10/2014)

| SECONDARY SURVEY CONTROL BASELINE |         |          |             |                     |              |                   |
|-----------------------------------|---------|----------|-------------|---------------------|--------------|-------------------|
| Point                             | Station | Distance | Bearing     | Project Coordinates |              | Elev. Desc.       |
|                                   |         |          |             | North (Y)           | East (X)     |                   |
| CSS                               | 901     |          |             | 3460249.009         | 10534670.036 | 1974.17 Pin & Cap |
|                                   |         | 617.76'  | N68°44'50"E |                     |              |                   |
| CSS                               | 902     |          |             | 3460472.938         | 10535245.787 | 1967.03 Pin & Cap |
|                                   |         | 691.61'  | N60°13'55"E |                     |              |                   |
| CSS                               | 717     |          |             | 3460816.317         | 10535846.136 | 1958.22 Pin & Cap |
|                                   |         | 700.42'  | N59°05'57"E |                     |              |                   |
| CSS                               | 718     |          |             | 3461176.020         | 10536447.133 | 1966.46 Pin & Cap |
|                                   |         | 571.11'  | N61°31'27"E |                     |              |                   |
| CSS                               | 719     |          |             | 3461448.321         | 10536949.151 | 1984.95 Pin & Cap |
|                                   |         | 510.30'  | N65°27'12"E |                     |              |                   |
| CSS                               | 720     |          |             | 3461660.315         | 10537413.329 | 1995.82 Pin & Cap |
|                                   |         | 542.55'  | N70°56'33"E |                     |              |                   |
| CSS                               | 721     |          |             | 3461837.469         | 10537926.146 | 2009.75 Pin & Cap |
|                                   |         | 632.69'  | N77°03'17"E |                     |              |                   |
| CSS                               | 903     |          |             | 3461979.205         | 10538542.760 | 2028.01 Pin & Cap |
|                                   |         | 605.71'  | N80°57'14"E |                     |              |                   |
| CSS                               | 904     |          |             | 3462074.441         | 10539140.939 | 2047.10 Pin & Cap |
|                                   |         | 598.13'  | N81°10'57"E |                     |              |                   |
| CSS                               | 722     |          |             | 3462166.126         | 10539731.997 | 2070.79 Pin & Cap |
|                                   |         | 665.59'  | N81°14'45"E |                     |              |                   |
| CSS                               | 723     |          |             | 3462267.424         | 10540389.832 | 2097.31 Pin & Cap |
|                                   |         | 713.46'  | N80°50'03"E |                     |              |                   |
| CSS                               | 724     |          |             | 3462381.073         | 10541094.180 | 2121.75 Pin & Cap |
|                                   |         | 696.97'  | N81°03'26"E |                     |              |                   |
| CSS                               | 725     |          |             | 3462489.416         | 10541782.676 | 2119.36 Pin & Cap |
|                                   |         | 547.03'  | N83°39'44"E |                     |              |                   |
| CSS                               | 726     |          |             | 3462549.802         | 10542326.365 | 2100.20 Pin & Cap |
|                                   |         | 363.54'  | N88°17'29"E |                     |              |                   |
| CS                                | 905     |          |             | 3462560.641         | 10542689.740 | 2086.52 Pin & Cap |
|                                   |         | 645.11'  | S86°44'09"E |                     |              |                   |
| CS                                | 906     |          |             | 3462523.908         | 10543333.801 | 2062.87 Pin & Cap |
|                                   |         | 710.89'  | S79°54'32"E |                     |              |                   |
| CS                                | 727     |          |             | 3462399.352         | 10544033.691 | 2036.44 Pin & Cap |
|                                   |         | 681.00'  | S72°42'32"E |                     |              |                   |
| CS                                | 728     |          |             | 3462196.939         | 10544683.919 | 2010.45 Pin & Cap |
|                                   |         | 785.80'  | S65°09'23"E |                     |              |                   |
| CS                                | 729     |          |             | 3461866.791         | 10545396.997 | 1984.41 Pin & Cap |
|                                   |         | 865.60'  | S64°24'44"E |                     |              |                   |
| CS                                | 907     |          |             | 3461492.945         | 10546177.700 | 1963.13 Pin & Cap |
|                                   |         | 681.80'  | S79°25'10"E |                     |              |                   |
| CS                                | 908     |          |             | 3461367.754         | 10546847.910 | 1958.23 Pin & Cap |
|                                   |         |          |             |                     |              |                   |

d116156001f(2).dgn  
Plotted By: elliley  
By Resolution of Highway Commission  
dated October 4, 1956

LIMITED ACCESS HIGHWAY

| REVISED | STATE | ROUTE | STATE PROJECT                       | SHEET NO. |
|---------|-------|-------|-------------------------------------|-----------|
|         | VA.   | 81    | 0081-095-829, PE-101, RW-201, C-501 | 1F(2)     |

DESIGN FEATURES RELATING TO CONSTRUCTION OR TO REGULATION AND CONTROL OF TRAFFIC MAY BE SUBJECT TO CHANGE AS DEEMED NECESSARY BY THE DEPARTMENT

PH PLANS

THESE PLANS ARE UNFINISHED AND UNAPPROVED AND ARE NOT TO BE USED FOR ANY TYPE OF CONSTRUCTION OR THE ACQUISITION OF RIGHT OF WAY.

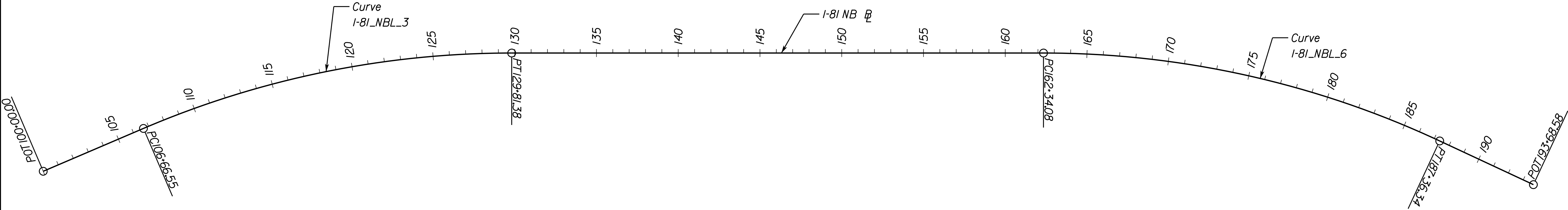
| REVISED | STATE | ROUTE | STATE<br>PROJECT                       | SHEET NO. |
|---------|-------|-------|--|-----------|
|         | VA.   | 81    | 0081-095-829, PE-101,<br>RW-201, C-501 | 1G        |

DESIGN FEATURES RELATING TO CONSTRUCTION  
OR TO REGULATION AND CONTROL OF TRAFFIC  
MAY BE SUBJECT TO CHANGE AS DEEMED  
NECESSARY BY THE DEPARTMENT

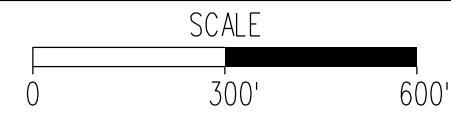
PH PLANS

THESE PLANS ARE UNFINISHED  
AND UNAPPROVED AND ARE NOT  
TO BE USED FOR ANY TYPE  
OF CONSTRUCTION OR THE  
ACQUISITION OF RIGHT OF WAY.

CONSTRUCTION ALIGNMENT  
DATA SHEET



| I-81 NB @ |               |                    |                |                 |               |           |           |           |                   |
|-----------|---------------|--------------------|----------------|-----------------|---------------|-----------|-----------|-----------|-------------------|
|           | STATION       | BEARING            | NORTHING       | EASTING         | DEGREE        | LENGTH    | RADIUS    | TANGENT   | DELTA             |
| 181NB_3   | POT 100+00.00 |                    | 3,460,853.8874 | 10,535,856.1006 |               |           |           |           |                   |
|           | PC 106+66.55  | N 57° 54' 16.00" E | 3,461,208.0448 | 10,536,420.7732 |               |           |           |           |                   |
|           | PI 118+39.97  |                    | 3,461,831.5225 | 10,537,414.8530 | 1° 00' 00.00" | 2,314.83' | 5,729.58' | 1,173.42' | 23° 08' 54.00" RT |
|           | PT 129+81.38  |                    | 3,462,014.0184 | 10,538,573.9967 |               |           |           |           |                   |
| 181NB_6   | PC 162+34.08  | N 81° 03' 10.00" E | 3,462,519.8932 | 10,541,787.1175 |               |           |           |           |                   |
|           | PI 175+05.48  |                    | 3,462,717.6273 | 10,543,043.0477 | 1° 00' 00.00" | 2,502.26' | 5,729.58' | 1,271.40' | 25° 01' 21.20" RT |
|           | PT 187+36.34  |                    | 3,462,365.5752 | 10,544,264.7345 |               |           |           |           |                   |
|           | POT 193+68.58 | S 73° 55' 28.80" E | 3,462,190.5062 | 10,544,872.2567 |               |           |           |           |                   |



PROJECT  
0081-095-829

SHEET NO.  
1G



PROJECT MANAGER James Jones, L.S., (276) 696-3257 (Bristol)  
SURVEYED BY, DATE Woolpert Inc., (757) 549-3549 (Nov. 24, 2019)  
DESIGN BY Tamara Pritchard, P.E., (276) 696-3249 (Bristol)  
SUBSURFACE UTILITY BY, DATE Woolpert Inc., (757) 549-3549 (Nov. 24, 2019)

TRANSPORTATION MANAGEMENT PLAN

- 1.) PROJECT CATEGORY (MINIMUM TMP REQUIREMENTS)
- A.) THIS WILL BE A TYPE B, CATEGORY III PROJECT.
- B.) THE LENGTH OF THE WORK ZONE WILL BE 6659 FEET.  
THE WIDTH OF THE WORK ZONE WILL VARY 4 FEET TO 170 FEET.
- C.) ALLOWABLE WORK ZONE HOURS SHALL BE IN ACCORDANCE WITH THE LIMITATIONS OF OPERATIONS SPECIAL PROVISION AND SHEET 1J(2).
- D.) THE TRAFFIC IN THIS AREA CONSIST OF PRIMARILY LOCAL TRAFFIC, COMMUTERS, AND TRUCK TRAFFIC.
- E.) ALL NORTHBOUND TRAVEL LANES AND SHOULDERS WILL BE AFFECTED BY THE PROJECT WORK.
- F.) SPEED LIMIT OF ROADWAY IS REDUCED TO 60 MPH (NORMAL SPEED LIMIT IS 70 MPH).

- 2.) TEMPORARY TRAFFIC CONTROL (TTC) PLAN: (COMPONENT 1)
- A.) MAJOR COMPONENTS WILL CONSIST OF GENERAL NOTES AND SPECIAL DETAILS.
- B.) SPECIFIC TRAFFIC CONTROL FIGURES AND NOTES FROM THE 2001 VA WAPM, REVISION 2 - 2019 USED FOR TRAFFIC CONTROL ARE:  
TTC-1J - WORK BEYOND THE SHOULDER OPERATION  
TTC-7J - SHOULDER CLOSURE WITH BARRIER AND LANE SHIFT OPERATION  
TTC-16.2 - OUTSIDE LANE CLOSURE OPERATION ON A FOUR-LANE ROADWAY  
TTC-17.2 - INSIDE LANE CLOSURE OPERATION ON A FOUR-LANE ROADWAY  
TTC-39.2 - WORK OPERATION IN THE VICINITY OF AN ENTRANCE RAMP  
TTC-52.2 - SIGNING FOR SPEED LIMIT AND FINE SIGNS IN WORK ZONES  
TTC-53.D - SIGNING FOR PROJECT LIMITS  
TTC-55J - ERADICATION OF PAVEMENT MARKINGS IN A WORK ZONE  
TTC-60.D - TEMPORARY PAVEMENT MARKING AND MARKER GUIDELINES

- 3.) PUBLIC COMMUNICATION STRATEGIES: (COMPONENT 2)
- A.) PROJECT DESCRIPTION  
THE PROJECT WILL INCLUDE WIDENING OF I-81 NB TO ACCOMMODATE THE ADDITION OF A TRUCK CLIMBING LANE.
- B.) TRAFFIC IMPACTS  
I-81 NB: TEMPORARY LANE CLOSURES AND SHOULDER CLOSURES
- C.) THE CONTRACTOR SHALL NOTIFY THE DISTRICT COMMUNICATIONS OFFICE AT (276) 696-3283 AT LEAST 72 HOURS IN ADVANCE OF ANY SCHEDULED WORK PLANS THAT WILL CAUSE TRAFFIC DELAYS OR CHANGES TO TRAFFIC PATTERNS.
- D.) THE CONTRACTOR SHALL NOTIFY THE REGIONAL TRANSPORTATION OPERATIONS CENTER AT (540) 375-0170 IN ACCORDANCE WITH THE TECHNICAL REQUIREMENTS TO PLACE LANE CLOSURE INFORMATION ON THE 511 SYSTEM AND VA-TRAFFIC.

- 4.) TRAFFIC OPERATIONS (TO) PLAN
- A.) TRAFFIC BACKUP NOTIFICATION
- EMERGENCY CONTACT FOR THIS PROJECT SHALL BE 911.
- THE TRAFFIC OPERATIONS CENTER (540) 387-5320 SHALL BE NOTIFIED OF LANE CLOSURES OR OTHER TRAFFIC IMPACTS BY THE PROJECT STAFF. THE TOC WILL UTILIZE AVAILABLE SYSTEMS (CAMERAS, SENSORS, ETC) TO MONITOR THE WORK AREA AND ALL ADJACENT AREAS. THE TOC WILL MAKE ALL ENTRIES INTO SYSTEMS THAT FEED THIS INFORMATION INTO 511. THE TOC WILL UTILIZE ASSETS SUCH AS PERMANENT AND MOBILE VARIABLE MESSAGE SIGNS WITH CDMA MODEMS TO ALERT MOTORISTS OF LANE CLOSURES AND OTHER INCIDENTS THAT MAY IMPACT TRAVEL.
- THE TOC WILL ALSO MAKE NOTIFICATIONS TO DEPARTMENT STAFF. THE STAFF NOTIFICATIONS SHALL INCLUDE BUT NOT BE LIMITED TO THE DUTY OFFICER, AREA CONSTRUCTION ENGINEER, PROJECT MAINTENANCE OF TRAFFIC COORDINATOR, PROJECT MANAGER, RESIDENT ADMINISTRATOR, DISTRICT WORK ZONE SAFETY COORDINATOR, DISTRICT TRAFFIC ENGINEER, REGIONAL TRAFFIC OPERATIONS MANAGER, REGIONAL INCIDENT MANAGEMENT COORDINATOR, AND DISTRICT COMMUNICATIONS OFFICE MANAGER OF ANY INCIDENTS AND EXPECTED TRAFFIC DELAYS.

THE TOC SHALL BE RESPONSIBLE FOR INTRA-AGENCY NOTIFICATIONS TO ENTITIES SUCH AS, BUT NOT LIMITED TO, WASHINGTON COUNTY ADMINISTRATOR, VIRGINIA STATE POLICE, LOCAL 911, AND OTHER AFFECTED AGENCIES.

A REVIEW OF ALL MAJOR INCIDENTS, AS DETERMINED BY THE REGIONAL INCIDENT MANAGEMENT COORDINATOR, SHALL BE ACCOMPLISHED WITHIN 48 HOURS OF CLEARANCE OF THE INCIDENT. VDOT PROJECT STAFF, REGIONAL OPERATIONS STAFF, CONTRACTOR STAFF, AND EMERGENCY RESPONDERS SHALL BE REPRESENTED AT THESE MEETINGS.

| REVISED   | STATE   | ROUTE | STATE PROJECT                 | SHEET NO. |
|---|---|-------|-------------------------------|-----------|
|   | VA.   | 81    | 0081-095-829, RW-201<br>C-501 | 1J(1)     |
| DESIGN FEATURES RELATING TO CONSTRUCTION OR TO REGULATION AND CONTROL OF TRAFFIC MAY BE SUBJECT TO CHANGE AS DEEMED NECESSARY BY THE DEPARTMENT |   |       |                               |           |
| VDOT Traffic<br>Bristol, Virginia<br>TRAFFIC ENGINEER   | VDOT Location & Design<br>Bristol, Virginia<br>ROADWAY ENGINEER |       |                               |           |

| TARGET AUDIENCE          | CONTACT METHOD  | PHONE NUMBER,<br>E-MAIL OR ADDRESS  | RESPONSIBLE CHARGE   |
|--------------------------|---|---|--|
| MOTORISTS                | NEWS RELEASE,<br>WEEKLY TRAFFIC<br>INFORMATION<br>(ROADWATCH) AND<br>TRAFFIC OPERATIONS<br>CENTER | SEE PUBLIC AFFAIRS<br>NEW RELEASE<br>DISTRIBUTION LIST<br>(E-MAIL AND FAX)  | DISTRICT COMMUNICATIONS<br>OFFICE<br>MICHELLE EARL<br>(276) 696-3283 |
| POLICE, EMS              | PHONE   | EMERGENCY: 911<br>VIRGINIA STATE POLICE (AREA 27 OFFICE): 276-669-2641<br>WASHINGTON CO. VOLUNTEER FIRE DEPT.: 276-669-1411<br>WASHINGTON CO. EMERGENCY MANAGEMENT: 276-525-1330  | ACE<br>BRIAN PLUMMER<br>276-696-3439                                 |
| COUNTY/TOWN<br>OFFICIALS | PHONE   | WASHINGTON COUNTY ADMINISTRATOR<br>276-525-1300   | ACE<br>BRIAN PLUMMER<br>276-696-3439                                 |
| VDOT                     |   | REGIONAL TRANSPORTATION OPERATION CENTER (TOC):<br>540-375-0170<br>BRISTOL DISTRICT OFFICE: 276-669-6151<br>DISTRICT COMMUNICATIONS OFFICE: 276-696-3283<br>ABINGDON RESIDENCY ADMINISTRATOR: 276-676-5503<br>DISTRICT WORK ZONE SAFETY COORDINATOR: 276-696-3425<br>AREA CONSTRUCTION ENGINEER: 276-696-3439 |  |

PH PLANS

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TO BE USED FOR ANY TYPE  
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ACQUISITION OF RIGHT OF WAY.

PROJECT MANAGER James Jones, L.S., (276) 696-3257 (Bristol)  
SURVEYED BY, DATE Woolpert Inc., (757) 549-3549 (Nov. 24, 2019)  
DESIGN BY Tamara Pritchard, P.E., (276) 696-3249 (Bristol)  
SUBSURFACE UTILITY BY, DATE Woolpert Inc., (757) 549-3549 (Nov. 24, 2019)

TRANSPORTATION MANAGEMENT PLAN

GENERAL NOTES

UNLESS OTHERWISE APPROVED OR DIRECTED BY THE ENGINEER, THE CONTRACTOR SHALL PLAN AND PROSECUTE THE WORK IN ACCORDANCE WITH THIS TRANSPORTATION MANAGEMENT PLAN.

THE NOTES IN THIS TRANSPORTATION PLAN ARE IN ADDITION TO ALL APPLICABLE STANDARDS, SPECIFICATIONS, AND CONTRACT DOCUMENTS. ALL TRAFFIC MAINTENANCE SHALL CONFORM WITH THE FOLLOWING AND THE LATEST REVISIONS THERETO:

- 2009 MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (REV. 1 AND 2)
- 2011 VIRGINIA SUPPLEMENT TO THE 2009 MUTCD (REV. 1)
- 2011 VIRGINIA WORK AREA PROTECTION MANUAL (REV. 2)
- 2016 VDOT ROAD AND BRIDGE STANDARDS (LATEST REVISION)
- 2020 VDOT ROAD AND BRIDGE SPECIFICATIONS (LATEST REVISION)

THE TRANSPORTATION MANAGEMENT PLAN (TMP) IS INTENDED AS A GUIDE. IT IS NOT INTENDED TO ENUMERATE EVERY DETAIL WHICH MUST BE CONSIDERED IN THE CONSTRUCTION OF THIS PROJECT, BUT ONLY TO SHOW THE GENERAL HANDLING OF TRAFFIC. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO PRESENT A FORMAL TMP/MAINTENANCE OF TRAFFIC (MOT) PLAN TO THE ENGINEER FOR APPROVAL PRIOR TO ANY CONSTRUCTION THAT MAY AFFECT THE EXISTING TRAFFIC.

AT THE CONCLUSION OF EACH WORKDAY, EQUIPMENT SHALL NOT BE STORED WITHIN THE ESTABLISHED CLEAR ZONE AND/OR DEFLECTION ZONE OF PHYSICAL BARRIERS IN ACCORDANCE WITH THE CONTRACT DOCUMENTS. ANY AREAS EXCAVATED BELOW THE EXISTING PAVEMENT SURFACE AND WITHIN THE CLEAR ZONE, SHALL BE BACKFILLED WITH APPROVED MATERIAL TO FORM AN APPROXIMATE 6:1 WEDGE AGAINST THE EXISTING PAVEMENT SURFACE FOR THE SAFETY AND PROTECTION OF VEHICULAR TRAFFIC. SEE TEMPORARY WEDGE DETAIL ON VDOT STD. ACOT-1 IN THE 2016 ROAD AND BRIDGE STANDARDS. SEE APPENDIX A OF THE VAWAPM FOR DROP-OFF REQUIREMENTS.

ALL SIGNS, GROUP 2 CHANNELIZING DEVICES, AND ANY OTHER DEVICES USED IN THE CONSTRUCTION ZONE SHALL BE FURNISHED BY THE CONTRACTOR AND SHALL BE KEPT CLEAN AND PROPERLY ALIGNED AT ALL TIMES.

THE INSTALLATION AND REMOVAL OF GUARDRAIL SHALL BE COORDINATED SO AS NOT TO PRESENT ANY BLUNT END OR HAZARD TO THE MOTORING PUBLIC.

WHEN UTILIZED, TRAFFIC BARRIER SERVICE SHALL BE INSTALLED AND REMOVED SO AS NOT TO PRESENT ANY BLUNT END OR HAZARD TO THE MOTORING PUBLIC. THE PLACEMENT AND REMOVAL OF THE TRAFFIC BARRIER SERVICE AND BARRICADES ARE TO BE COORDINATED BY THE PROJECT SAFETY OFFICER.

THE CONTRACTOR SHALL MAINTAIN ALL SIGNAGE WITHIN THE LIMITS OF CONSTRUCTION, SHOWN OR OTHERWISE, UNLESS DIRECTED BY THE ENGINEER. IF REMOVAL IS ALLOWED, CONTRACTOR SHALL STORE THE SIGNS PER VDOT STANDARDS, AND IF DIRECTED, REPLACE THEM AT THE COMPLETION OF THE PROJECT.

THE CONTRACTOR SHALL ENSURE POSITIVE DRAINAGE FOR THE DURATION OF THE PROJECT. ADDITIONAL TEMPORARY MEASURES MAY BE NEEDED TO FACILITATE PROPER POSITIVE DRAINAGE.

THE CONTRACTOR SHALL SCHEDULE ALL PHASES OF CONSTRUCTION IN SUCH A MANNER THAT WATER, SEWER, CABLE, POWER, AND ANY OVERHANGING OR UNDERGROUND UTILITY SERVICES WILL NOT BE INTERRUPTED. THE CONTRACTOR SHALL COORDINATE THEIR UTILITY ADJUSTMENTS/RELOCATION ACTIVITIES WITH THE OWNER OF THE UTILITY.

EROSION AND SEDIMENT CONTROL MEASURES SHALL BE IN PLACE PRIOR TO THE BEGINNING OF CONSTRUCTION, AND SHALL BE REVISED AS NEEDED THROUGH CONSTRUCTION PHASES.

THE CONTRACTOR IS RESPONSIBLE FOR COORDINATING THE CONSTRUCTION, SIGNING, AND TRAFFIC MANAGEMENT PLAN WITH OTHER ADJACENT PROJECTS UNDER CONSTRUCTION.

THE CONTRACTOR SHALL SUBMIT TRAFFIC CONTROL PLANS NOT EXPRESSLY OUTLINED IN THE VAWAPM FOR APPROVAL PRIOR TO PERFORMING THE WORK. NO DEVIATIONS FROM THE PLANS WILL BE ALLOWED WITHOUT PRIOR APPROVAL FROM THE ENGINEER.

UNDER NO CIRCUMSTANCES SHALL CONCURRENT CONSTRUCTION LEFT AND RIGHT OF ANY LANE BE ALLOWED, UNLESS DIRECTED BY THE VDOT PROJECT MANAGER.

MEASURES SHALL BE TAKEN TO ENSURE ADEQUATE SIGHT DISTANCES DURING CONSTRUCTION OPERATIONS. TRAFFIC CONTROL DEVICES, SIGNS, CONSTRUCTION EQUIPMENT, MATERIAL STORAGE, OR ANY OTHER OBSTACLE WILL NOT BE ALLOWED TO INTERFERE WITH HORIZONTAL OR VERTICAL SIGHT DISTANCES.

GENERAL NOTES (CONT.)

ACCESS INTO AND OUT OF THE WORK ZONE SHALL TAKE INTO ACCOUNT ADEQUATE SIGHT DISTANCE AND ACCELERATION AND DECELERATION LENGTHS FOR CONSTRUCTION VEHICLES AND EQUIPMENT. INGRESS/EGRESS SHALL BE IN ACCORDANCE WITH THE VIRGINIA WORK AREA PROTECTION MANUAL.

EXISTING CONFLICTING PAVEMENT MARKINGS SHALL BE COMPLETELY ERADICATED BY GRINDING OR COVERED WITH TYPE E CONSTRUCTION MARKINGS.

THE CONTRACTOR SHALL TEMPORARILY COVER ANY EXISTING SIGNS THAT ARE CONTRARY TO CONSTRUCTION SIGNS AND UNCOVER THESE AT THE COMPLETION OF THE PROJECT AS DIRECTED BY THE ENGINEER.

CHANNELIZING DEVICE SPACING:  
TRANSITION: 40-FT  
TRAVELWAY: 80-FT

LANE/SHOULDER CLOSURES NEEDED

- 1. SINGLE LANE CLOSURES IN ACCORDANCE WITH VA WAPM TTC-16.2 AND 17.2
- 2. SHOULDER CLOSURES AS SHOWN IN PLAN AND IN ACCORDANCE WITH VA WAPM TTC-7J.

ALLOWABLE LANE CLOSURE HOURS:

| Bristol District Interstate Allowable Work Hours |                    |                |           |   |                                 |                                |   |                                 |                                |          |
|--|--------------------|----------------|-----------|---|---------------------------------|--------------------------------|---|---------------------------------|--------------------------------|----------|
| Single Lane Closure                              |                    |                |           |   |                                 |                                |   |                                 |                                |          |
|  |                    |                |           | Recommended Allowable Workhours<br>Labor Day through Memorial Day |                                 |                                | Recommended Allowable Workhours<br>Memorial Day through Labor Day |                                 |                                |          |
| Roadway  | Counties           | Location       | Direction | Sunday Night thru<br>Friday Morning                               | Hours<br>Available<br>per night | Hours<br>Available<br>per week | Sunday Night thru Friday<br>Morning                               | Hours<br>Available<br>per night | Hours<br>Available<br>per week | Comments |
| I-81   | Washington & Smyth | MP 23 to MP 43 | NB & SB   | 7 PM to 6 AM  | 11                              | 55                             | 7 PM to 6 AM  | 11                              | 55                             |          |
| Shoulder Closure                                 |                    |                |           |   |                                 |                                |   |                                 |                                |          |
|  |                    |                |           | Recommended Allowable Workhours                                   |                                 |                                |   |                                 |                                |          |
| Roadway  | Counties           | Location       | Direction | Sunday Night thru<br>Friday Morning                               | Hours<br>Available<br>per day   | Hours<br>Available<br>per week | Comments  |                                 |                                |          |
| I-81   | Washington & Smyth | MP 23 to MP 43 | NB & SB   | 12 AM to 12AM   | 24                              | 120                            | 7 PM Sunday to 6 AM Friday  |                                 |                                |          |

THESE ALLOWABLE HOURS SHALL BE APPLICABLE UNLESS OTHERWISE APPROVED BY THE ENGINEER.

IN ADDITION TO THE WORK RESTRICTIONS FOR HOLIDAYS IN PART 5, SECTION 10B.02 (LIMITATION OF OPERATIONS), THE FOLLOWING HOLIDAYS AND EVENTS SHALL BE SUBJECT TO SAME RESTRICTIONS:

BRISTOL SPRING AND FALL NASCAR RACE

PORTABLE CHANGEABLE MESSAGE SIGNS

PORTABLE CHANGEABLE MESSAGE SIGNS (PCMS) SHALL BE USED IN ADVANCE OF THE WORK ZONE IN ACCORDANCE WITH THE CONTRACT.

PH PLANS

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ACQUISITION OF RIGHT OF WAY.

PROJECT MANAGER James Jones, L.S. (276) 696-3257 (Bristol)  
SURVEYED BY, DATE Woolpert Inc., (757) 549-3549 (Nov. 24, 2019)  
DESIGN BY Tamara Pritchard, P.E. (276) 696-3249 (Bristol)  
SUBSURFACE UTILITY BY, DATE Woolpert Inc., (757) 549-3549 (Nov. 24, 2019)

| REVISED | STATE | ROUTE | STATE PROJECT                 | SHEET NO. |
|---------|-------|-------|-------------------------------|-----------|
|         | VA.   | 81    | 0081-095-829, RW-201<br>C-501 | 1J(3)     |

DESIGN FEATURES RELATING TO CONSTRUCTION OR TO REGULATION AND CONTROL OF TRAFFIC MAY BE SUBJECT TO CHANGE AS DEEMED NECESSARY BY THE DEPARTMENT

VDOT Location & Design  
Bristol, Virginia  
TRAFFIC ENGINEER

VDOT Location & Design  
Bristol, Virginia  
ROADWAY ENGINEER

# TRANSPORTATION MANAGEMENT PLAN

## INCIDENT MANAGEMENT NOTES:

1.THE CONTRACTOR SHALL BE RESPONSIBLE FOR IMPLEMENTING AND PROVIDING THE FOLLOWING:

NOTIFY THE VDOT PROJECT MANAGER & THE REGIONAL TRANSPORTATION OPERATIONS CENTER (TOC) IN ACCORDANCE WITH THE TECHNICAL REQUIREMENTS TO PLACE LANE CLOSURE INFORMATION ON THE 511 SYSTEM AND VA-TRAFFIC. THE TELEPHONE NUMBER TO THE TOC IS 540-375-0170.

PROVIDE ALL FIELD CREW A LIST OF EMERGENCY RESPONSE AGENCIES INCLUDING:

POLICE/AMBULANCE/FIRE/SAFETY/HAZMAT SPILLS - 911  
VIRGINIA STATE POLICE - 276.669.2641  
WASHINGTON CO. SHERIFF - 276.676.6000  
WASHINGTON CO. EMERGENCY MANAGEMENT - 276.525.1330

PROCEDURES TO RESPOND TO TRAFFIC INCIDENTS THAT OCCUR IN THE WORK ZONE:

1.THE CONTRACTOR IS REQUIRED TO IMMEDIATELY REPORT TO THE STATE POLICE AND THE VDOT PROJECT MANAGER.

2.THE CONTRACTOR SHALL ASSIST IN PROVIDING EMERGENCY RESPONDERS ACCESS TO THE INCIDENT (AS NECESSARY).

3.THE CONTRACTOR SHALL NOTIFY THE TOC WHICH WILL SET INTO PLACE THE PROCEDURE DEFINED FOR UNSCHEDULED TRAFFIC BACKUP/DELAY.

4.UPON NOTIFICATION FROM THE TOC OF AN INCIDENT REQUIRING A DETOUR, THE CONTRACTOR SHALL ESTABLISH THE DETOUR WITHIN ONE (1) HOUR FROM 5 AM-9 PM DAILY. THE CONTRACTOR SHALL ESTABLISH THE DETOUR WITHIN TWO (2) HOURS DURING ALL OTHER TIMES NOT REFERENCED.

5.DEPENDING ON THE SEVERITY OF THE INCIDENT, THE CONTRACTOR MAY HAVE TO SHUT DOWN WORK ZONES.

6.UPON ARRIVAL ON THE SCENE, THE VIRGINIA STATE POLICE WILL DETERMINE RESPONSE NECESSARY TO ALL TRAVELING PUBLIC AROUND THE INCIDENT.

7.TOC SHALL NOTIFY DISTRICT COMMUNICATIONS OFFICE AND THE RESIDENCY OFFICE OF THE INCIDENT.

8.THE CONTRACTOR SHALL COMPLETE AN ACCIDENT REPORT TO INCLUDE SKETCHES AND PHOTOS OF THE WORK ZONE. THE VIRGINIA STATE POLICE WILL TAKE CONTROL OF THE INCIDENT AND DIRECT ITS CLEARING AND RESTORATION TO NORMAL TRAFFIC FLOW.

9.THE VIRGINIA STATE POLICE REPORT OF THE INCIDENT WILL BE REVIEWED BY THE AREA CONSTRUCTION ENGINEER TO DETERMINE IF ANY MODIFICATION OF THE TEMPORARY TRAFFIC CONTROL PLAN IS NECESSARY. IF IT IS DETERMINED THAT IT IS NECESSARY TO ALTER THE PLAN, A MEETING WILL BE CALLED WITH THE CONTRACTOR, VDOT PROJECT PERSONNEL, VDOT SAFETY REPRESENTATIVES, AND THE VIRGINIA STATE POLICE (IF NECESSARY) TO DISCUSS MODIFICATION AND IMPLEMENTATION OF AN IMPROVED TRAFFIC CONTROL PLAN.

10. WITHIN 24 HOURS OF ANY INCIDENTS WITHIN THE CONSTRUCTION WORK ZONE, A REVIEW OF THE TRAFFIC CONTROLS SHALL BE COMPLETED AND NECESSARY ADJUSTMENTS MADE TO REDUCE THE POTENTIAL FOR FUTURE INCIDENTS.

## DETOUR NOTES:

- DETOUR MAP SHOWN MODELED AFTER VA WAPM TIMC-8J.
- WHEN INCIDENT ON I-81 REQUIRES CLOSURE OF NORTHBOUND LANES THROUGH THE WORK ZONE, ADDITIONAL SIGNING IN ACCORDANCE WITH VA WAPM TIMC-7J MAY BE NECESSARY.
- DURING AN INCIDENT, ADVANCE PORTABLE CHANGEABLE MESSAGE SIGNS (PCMS) SHALL DISPLAY RELEVANT INFORMATION CONCERNING THE INCIDENT. THE FOLLOWING MESSAGES ARE SUGGESTED:

A. IN THE EVENT THE INTERSTATE IS CLOSED:

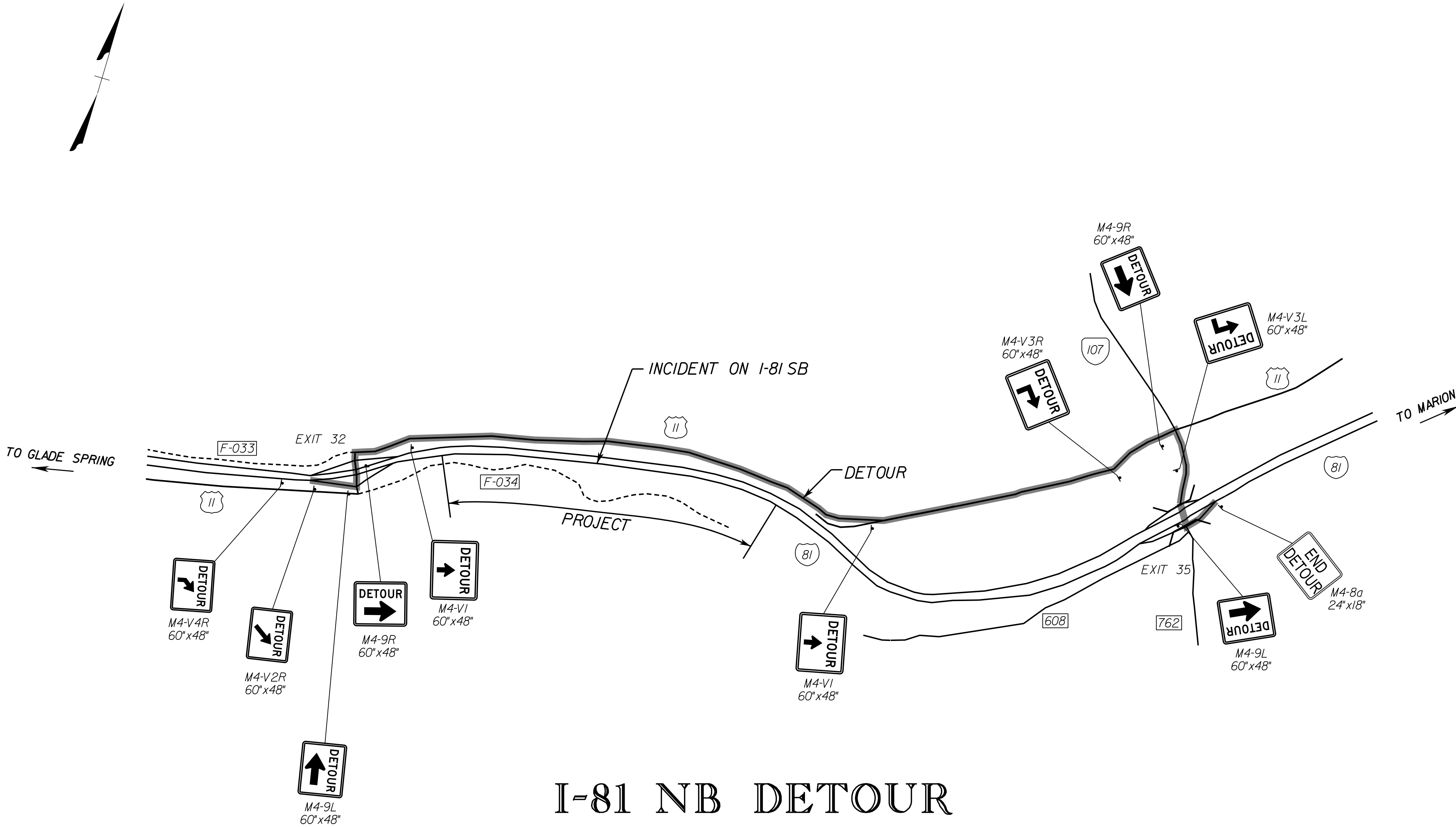
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|-------------------------------------|-------------------------------------|
| SCREEN 1<br>I-81<br>NORTH<br>CLOSED | SCREEN 2<br>ALL VEH<br>MUST<br>EXIT |
|-------------------------------------|-------------------------------------|

B. IN THE EVENT THE INTERSTATE IS STILL OPEN:

|                               |                              |
|-------------------------------|------------------------------|
| SCREEN 1<br>INCIDENT<br>AHEAD | SCREEN 2<br>EXPECT<br>DELAYS |
|-------------------------------|------------------------------|

## LEGEND:

— DENOTES PROPOSED DETOUR ROUTE



## I-81 NB DETOUR

## PH PLANS

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NOT TO SCALE

PROJECT  
0081-095-829

SHEET NO.  
1J(3)

PROJECT MANAGER James Jones, L.S., (276) 696-3257, (Bristol) .....

SURVEYED BY, DATE Woolpert Inc., (757) 549-3549 (Nov. 24, 2019) .....

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TRANSPORTATION MANAGEMENT PLAN  
SEQUENCE OF CONSTRUCTION

| REVISED  | STATE   | ROUTE | STATE                         | SHEET NO. |
|--|---|-------|-------------------------------|-----------|
|  |   |       | PROJECT                       |           |
|  | VA.   | 81    | 0081-095-829, RW-201<br>C-501 | 1J(4)     |
| DESIGN FEATURES RELATING TO CONSTRUCTION<br>OR TO REGULATION AND CONTROL OF TRAFFIC<br>MAY BE SUBJECT TO CHANGE AS DEEMED<br>NECESSARY BY THE DEPARTMENT |   |       |                               |           |
|  |   |       |                               |           |
| VDOT Traffic<br>Bristol, Virginia<br>TRAFFIC ENGINEER  | VDOT Location & Design<br>Bristol, Virginia<br>ROADWAY ENGINEER |       |                               |           |

SEQUENCE OF CONSTRUCTION

PHASE 1

- MEDIAN SHOULDER STRENGTHENING SHALL BE CONSTRUCTED UNDER PROJECT NO. 0081-961-642, P-101, N-501 (UPC 116723) PRIOR TO CONSTRUCTION OF THIS PROJECT.
- THE CONTRACTOR SHALL SUBMIT NEW MATERIALS AND ITEMS REQUIRED TO COMPLETE THE REMOVAL OR MODIFICATIONS OF EXISTING ITEMS TO THE ENGINEER FOR REVIEW AND APPROVAL IN ACCORDANCE WITH SECTION 105 OF VDOT SPECIFICATIONS.
- INSTALL CONSTRUCTION SIGNS TO COINCIDE WITH CONSTRUCTION ACTIVITIES.
- INSTALL PERIMETER E&S CONTROLS AS SHOWN IN THE PLANS.
- TEMPORARILY CLOSE THE NORTHBOUND INSIDE LANE IN ACCORDANCE WITH VA WAPM TTC-17.2 (INSIDE LANE CLOSURE OPERATION ON A FOUR-LANE ROADWAY).
- PERFORM FLEXIBLE PLANING AND OVERLAY ON THE INSIDE SHOULDER TO REMOVE AND RELOCATE RUMBLE STRIPS.

PHASE 2

- INSTALL CONSTRUCTION SIGNS TO COINCIDE WITH CONSTRUCTION ACTIVITIES.
- TEMPORARILY CLOSE THE NORTHBOUND OUTSIDE LANE IN ACCORDANCE WITH VA WAPM TTC-16.2 (OUTSIDE LANE CLOSURE OPERATION ON A FOUR-LANE ROADWAY).
- INSTALL TRAFFIC BARRIER SERVICE ADJACENT TO THE OUTSIDE SHOULDER AS SHOWN IN MOT PLAN (MODELED AFTER TTC-7J - SHOULDER CLOSURE WITH BARRIER AND LANE SHIFT OPERATION). AFTER INSTALLATION, RE-OPEN TWO LANES OF TRAFFIC.
- INSTALL PERIMETER E&S CONTROLS AS SHOWN IN THE PLANS.
- INSTALL ACCESS AREAS AS NEEDED.
- CONSTRUCT ROADWAY WIDENING.
- TEMPORARILY CLOSE NORTHBOUND OUTSIDE LANE IN ACCORDANCE WITH VA WAPM TTC-16.2 (OUTSIDE LANE CLOSURE OPERATION ON A FOUR-LANE ROADWAY).
- REMOVE TRAFFIC BARRIER SERVICE.

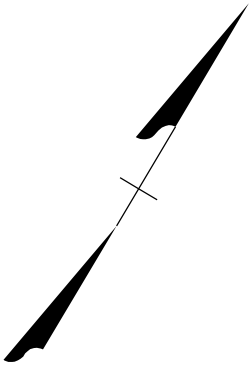
PHASE 3

- TEMPORARILY CLOSE NORTHBOUND OUTSIDE AND INSIDE LANES SEPARATELY IN ACCORDANCE WITH VA WAPM TTC-16.2/TTC-17.2 (OUTSIDE & INSIDE LANE CLOSURE OPERATION ON A FOUR-LANE ROADWAY).
- COMPLETE FINAL SURFACE PAVING ALONG I-81 NB.
- COMPLETE FINAL PAVEMENT MARKINGS ALONG I-81 NB.



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MAINTENANCE OF TRAFFIC -  
SEQUENCE OF CONSTRUCTION  
PHASE 1



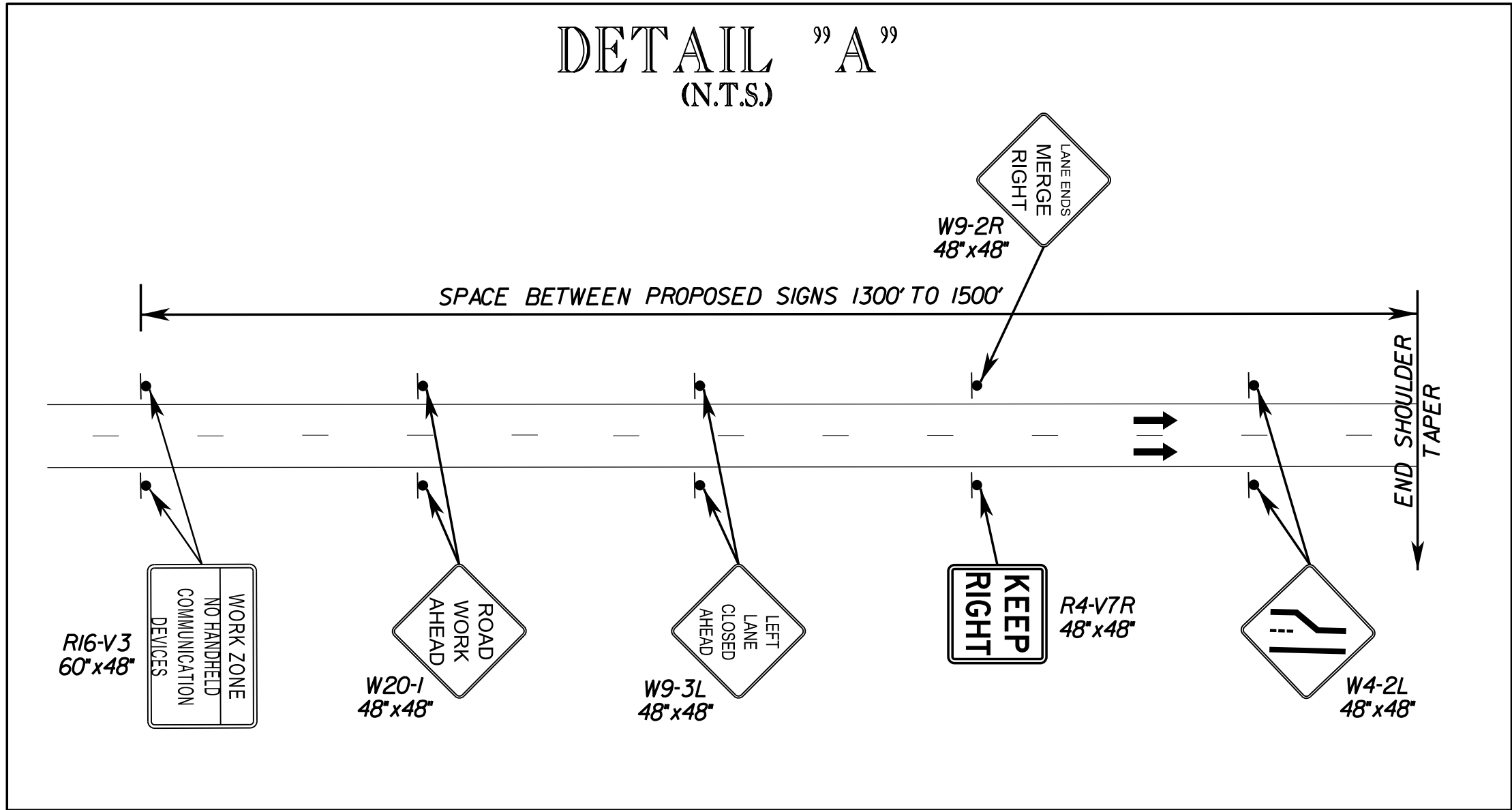
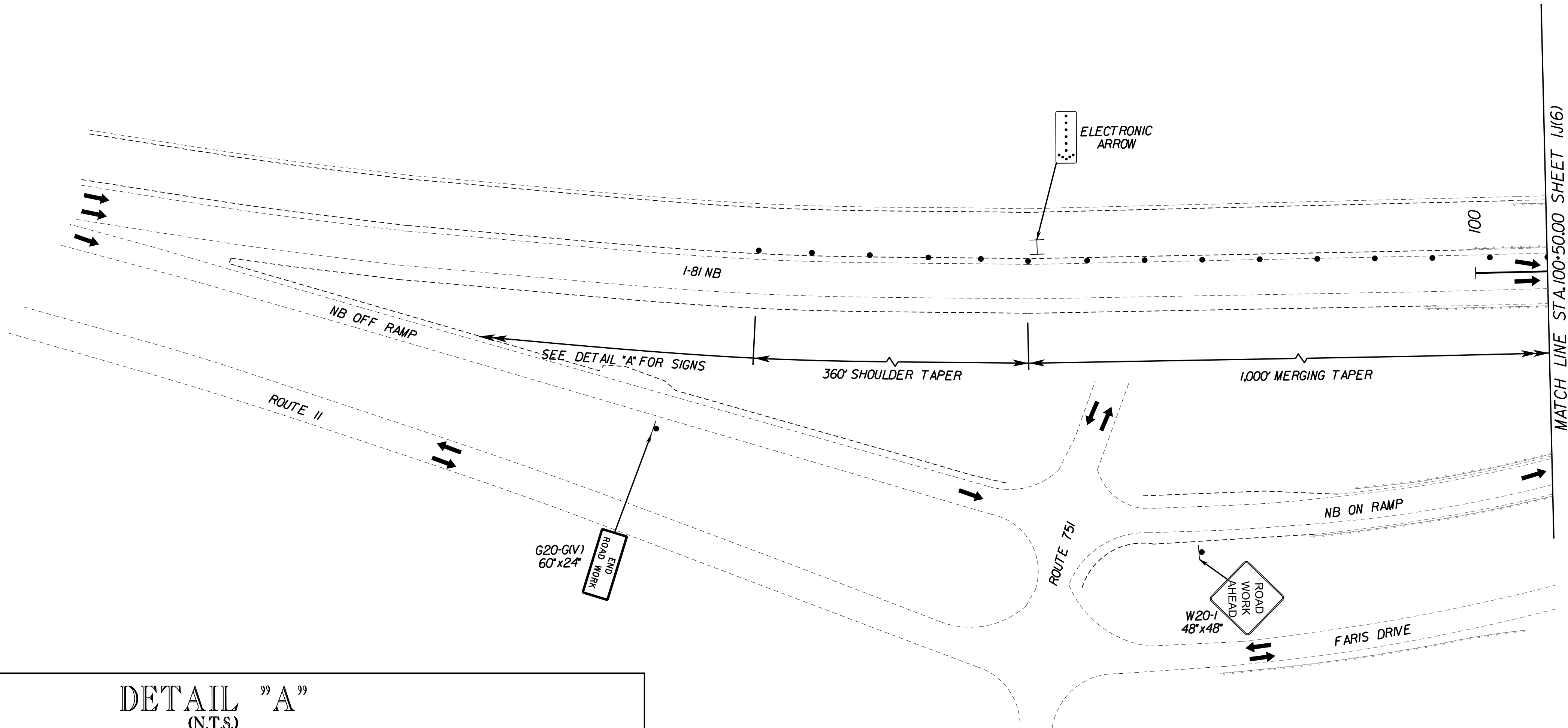
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|---|---|
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| VDOT Traffic<br>Bristol, Virginia<br>TRAFFIC ENGINEER | VDOT Location & Design<br>Bristol, Virginia<br>ROADWAY ENGINEER |

|         |       |       |                               |           |
|---------|-------|-------|-------------------------------|-----------|
| REVISED | STATE | ROUTE | STATE PROJECT                 | SHEET NO. |
|         | VA.   | 81    | 0081-095-829, RW-201<br>C-501 | 1J(5)     |

DESIGN FEATURES RELATING TO CONSTRUCTION  
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NECESSARY BY THE DEPARTMENT

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MAINTENANCE OF TRAFFIC LEGEND

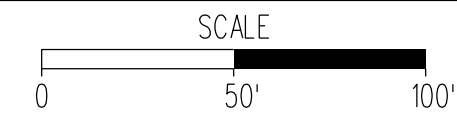
- AREA UNDER CONSTRUCTION (THIS PHASE)
- AREA PREVIOUSLY CONSTRUCTED

TEMPORARY PAVEMENT MARKING

- TYPE A 6" WHITE SOLID
- TYPE A 8" WHITE SOLID
- TYPE A 6" YELLOW SOLID
- TYPE A 8" YELLOW SOLID

ONE-WAY TEMPORARY PAVEMENT  
MARKERS SHALL BE INSTALLED ON  
20' CENTERS ON LANE SHIFT TAPERS

- TRAFFIC BARRIER SERVICE  
CONCRETE, ST'D. MB-11A
- GROUP 2 CHANNELIZING DEVICE
- CONSTRUCTION SIGN
- GROUP 2 CHANNELIZING DEVICE
- TRAFFIC FLOW ARROW
- IMPACT ATTENUATOR, TYPE 1, TL-3
- TYPE B WARNING LIGHT
- SHADOW VEHICLE WITH TMA

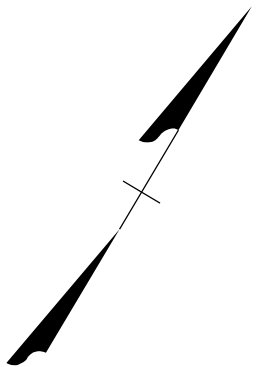


PROJECT  
0081-095-829

SHEET NO.  
1J(5)

PROJECT MANAGER James Jones, L.S., (276) 696-3257, (Bristol)  
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SUBSURFACE UTILITY BY, DATE Woolpert Inc., (757) 549-3549 (Nov. 24, 2019)

# MAINTENANCE OF TRAFFIC - SEQUENCE OF CONSTRUCTION PHASE 1

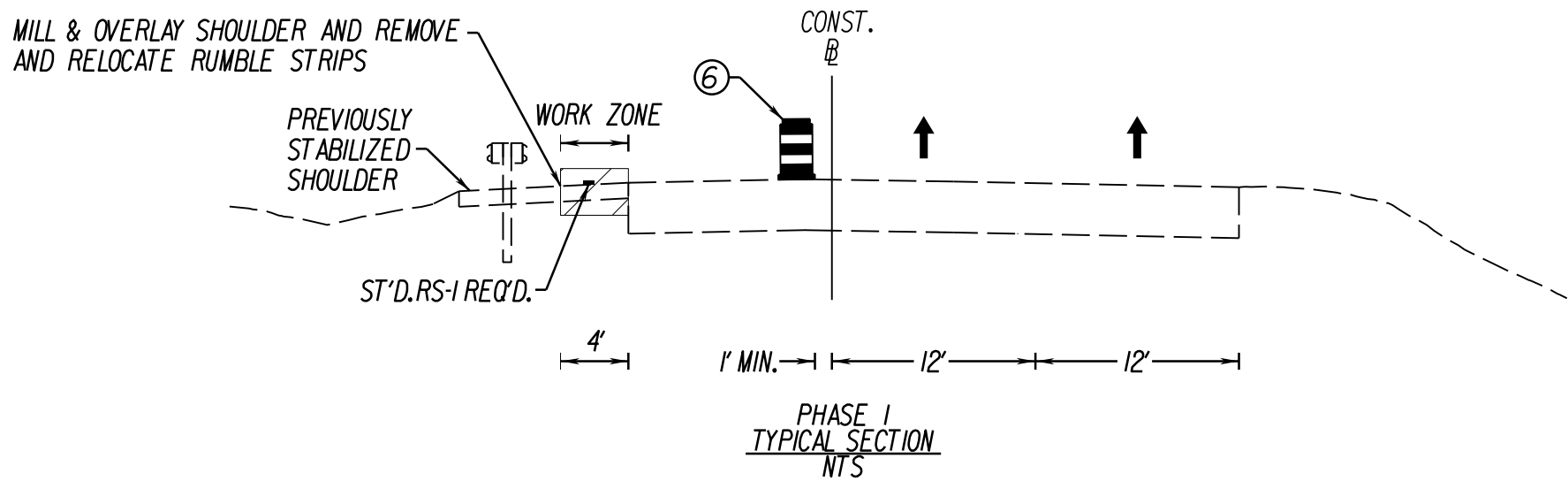
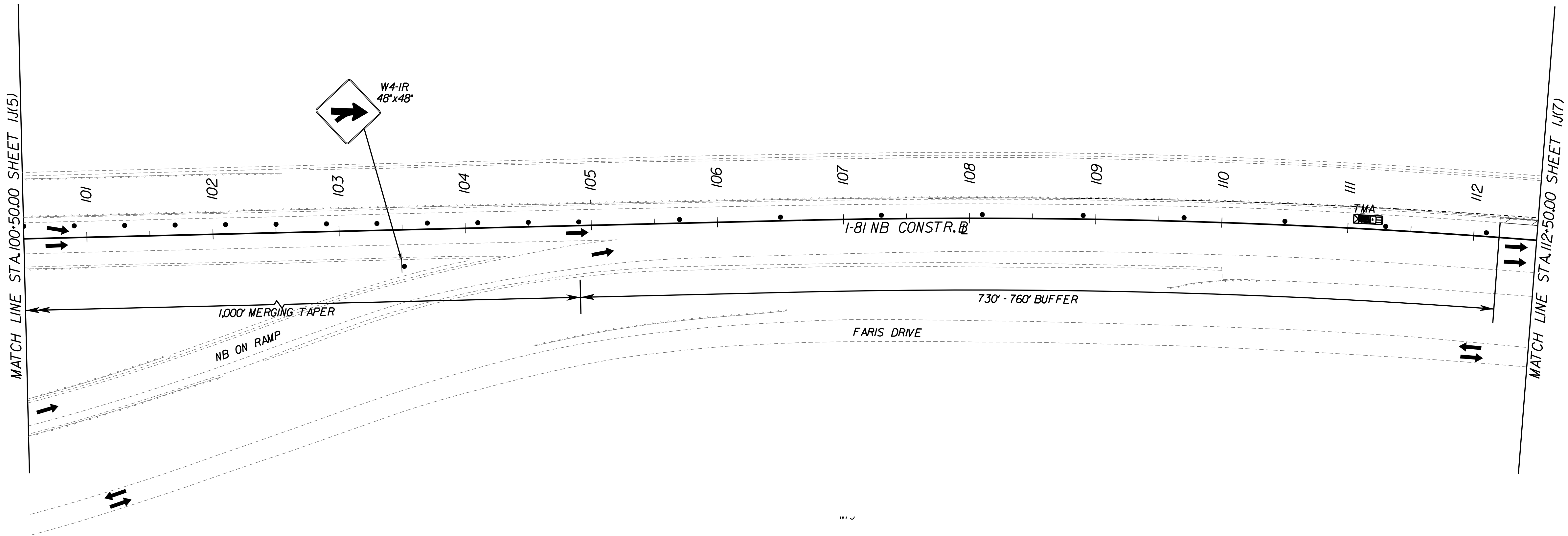


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Plotted By: elliey  
By Resolution of Highway Commission dated October 4, 1956

## PH PLANS

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AND UNAPPROVED AND ARE NOT  
TO BE USED FOR ANY TYPE  
OF CONSTRUCTION OR THE  
ACQUISITION OF RIGHT OF WAY.

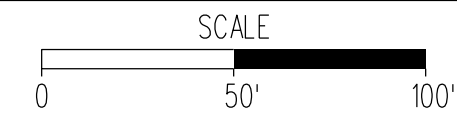


### TEMPORARY PAVEMENT MARKING

- ① TYPE A 6" WHITE SOLID
  - ② TYPE A 8" WHITE SOLID
  - ③ TYPE A 6" YELLOW SOLID
  - ④ TYPE A 8" YELLOW SOLID
- ONE-WAY TEMPORARY PAVEMENT MARKERS SHALL BE INSTALLED ON 20' CENTERS ON LANE SHIFT TAPERS

### MAINTENANCE OF TRAFFIC LEGEND

- AREA UNDER CONSTRUCTION (THIS PHASE)
- AREA PREVIOUSLY CONSTRUCTED
- ⑤ TRAFFIC BARRIER SERVICE CONCRETE, ST'D. MB-11A
- ⑥ GROUP 2 CHANNELIZING DEVICE
- CONSTRUCTION SIGN
- GROUP 2 CHANNELIZING DEVICE
- TRAFFIC FLOW ARROW
- IMPACT ATTENUATOR, TYPE 1, TL-3
- TYPE B WARNING LIGHT
- SHADOW VEHICLE WITH TMA

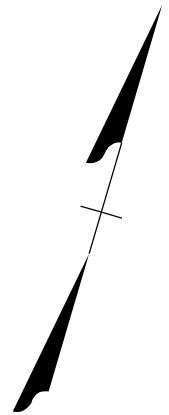


PROJECT  
0081-095-829

SHEET NO.  
1J(6)

PROJECT MANAGER James Jones, L.S., (276) 696-3257, (Bristol)  
SURVEYED BY, DATE Woolpert Inc., (757) 549-3549 (Nov. 24, 2019)  
DESIGN BY Tamara Pritchard, P.E., (276) 696-3249 (Bristol)  
SUBSURFACE UTILITY BY, DATE Woolpert Inc., (757) 549-3549 (Nov. 24, 2019)

MAINTENANCE OF TRAFFIC -  
SEQUENCE OF CONSTRUCTION  
PHASE 1



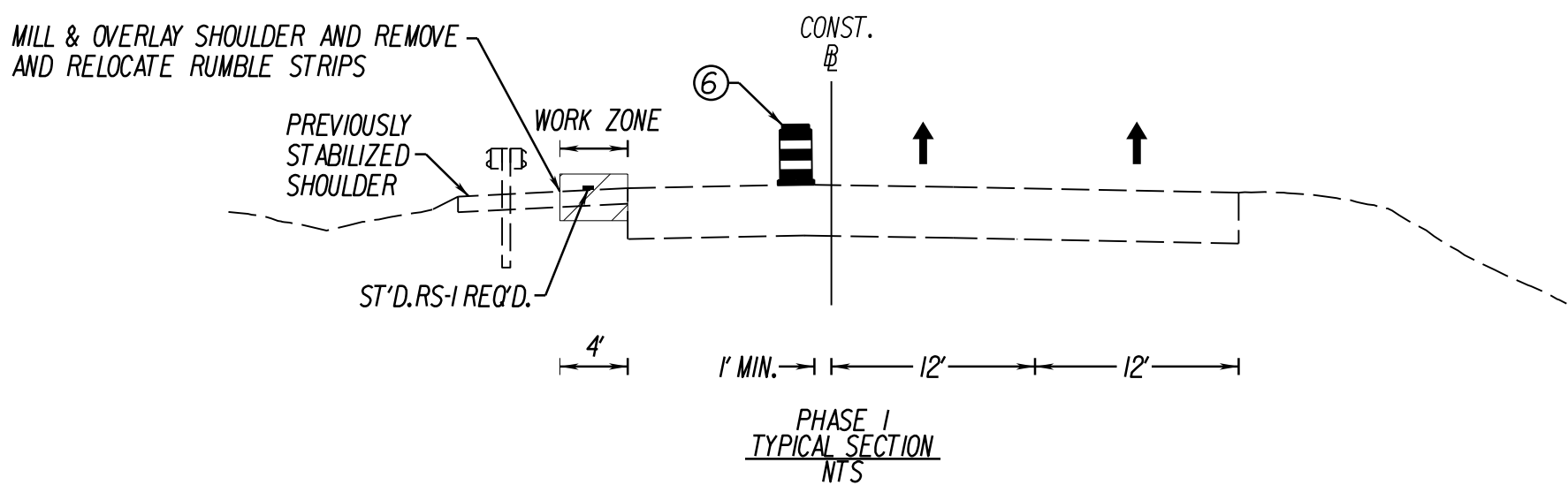
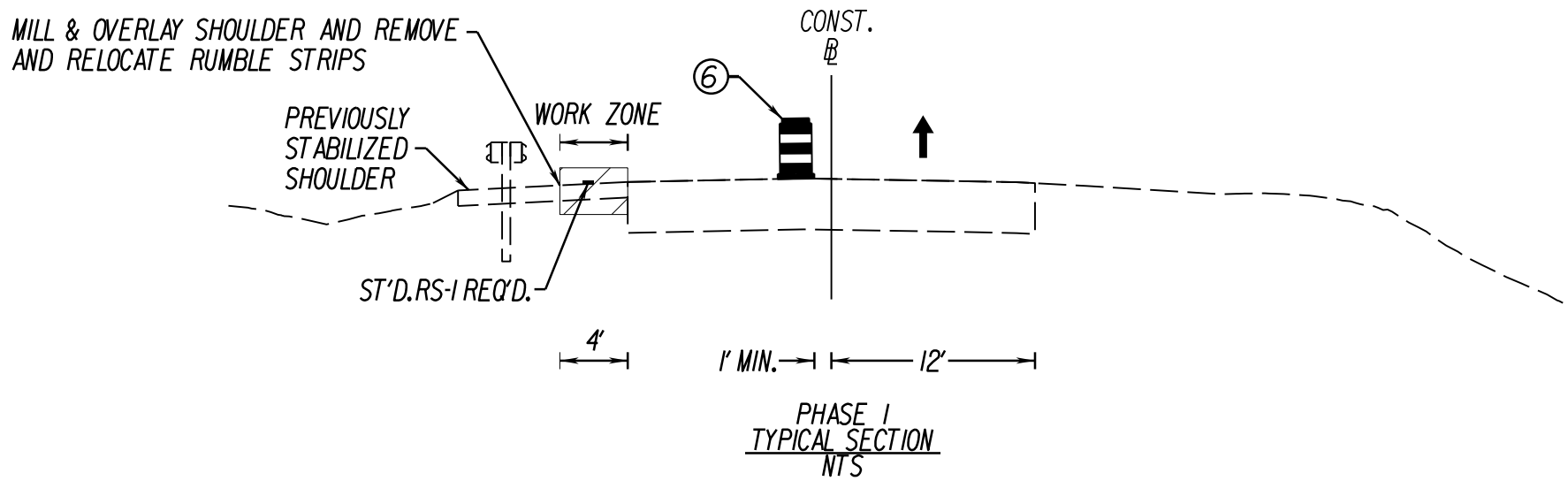
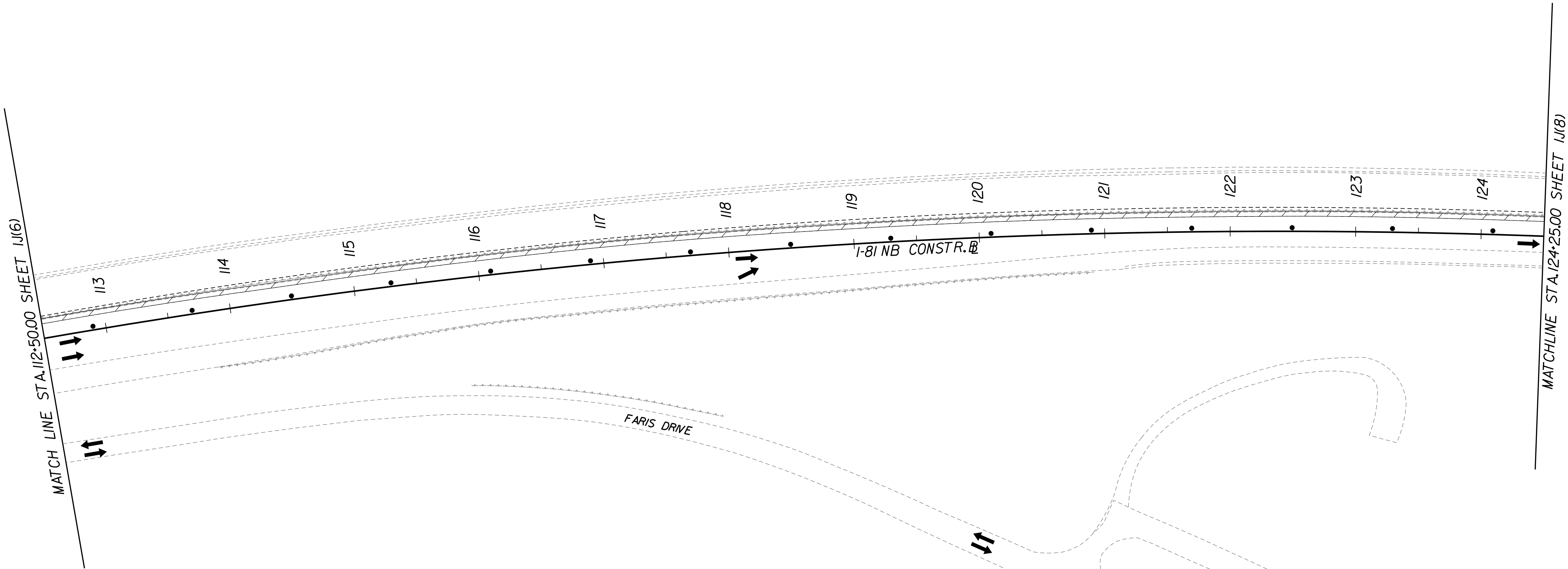
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| VDOT Traffic<br>Bristol, Virginia<br>TRAFFIC ENGINEER | VDOT Location & Design<br>Bristol, Virginia<br>ROADWAY ENGINEER |

| REVISED | STATE | ROUTE | STATE PROJECT                 | SHEET NO. |
|---------|-------|-------|-------------------------------|-----------|
|         | VA.   | 81    | 0081-095-829, RW-201<br>C-501 | 11(7)     |

DESIGN FEATURES RELATING TO CONSTRUCTION OR TO REGULATION AND CONTROL OF TRAFFIC MAY BE SUBJECT TO CHANGE AS DEEMED NECESSARY BY THE DEPARTMENT

PH PLANS

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MAINTENANCE OF TRAFFIC LEGEND

AREA UNDER CONSTRUCTION (THIS PHASE)

AREA PREVIOUSLY CONSTRUCTED

- ⑤ TRAFFIC BARRIER SERVICE CONCRETE, ST'D. MB-IIA
- ⑥ GROUP 2 CHANNELIZING DEVICE
- CONSTRUCTION SIGN
- GROUP 2 CHANNELIZING DEVICE
- TRAFFIC FLOW ARROW
- IMPACT ATTENUATOR, TYPE 1, TL-3
- TYPE B WARNING LIGHT
- SHADOW VEHICLE WITH TMA

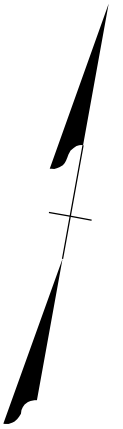
TEMPORARY PAVEMENT MARKING

- ① TYPE A 6" WHITE SOLID
- ② TYPE A 8" WHITE SOLID
- ③ TYPE A 6" YELLOW SOLID
- ④ TYPE A 8" YELLOW SOLID
- ONE-WAY TEMPORARY PAVEMENT MARKERS SHALL BE INSTALLED ON 20' CENTERS ON LANE SHIFT TAPERS

| SCALE      | PROJECT      | SHEET NO. |
|------------|--------------|-----------|
| 0 50' 100' | 0081-095-829 | 11(7)     |

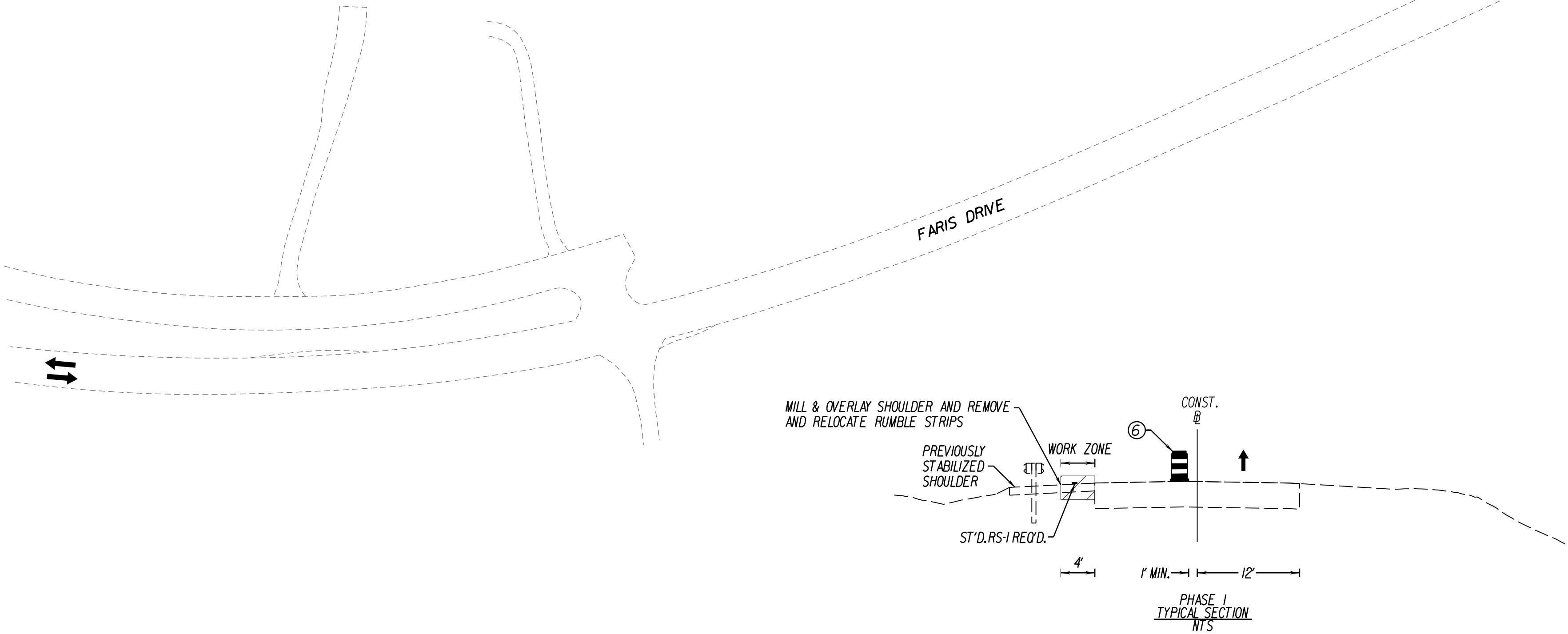
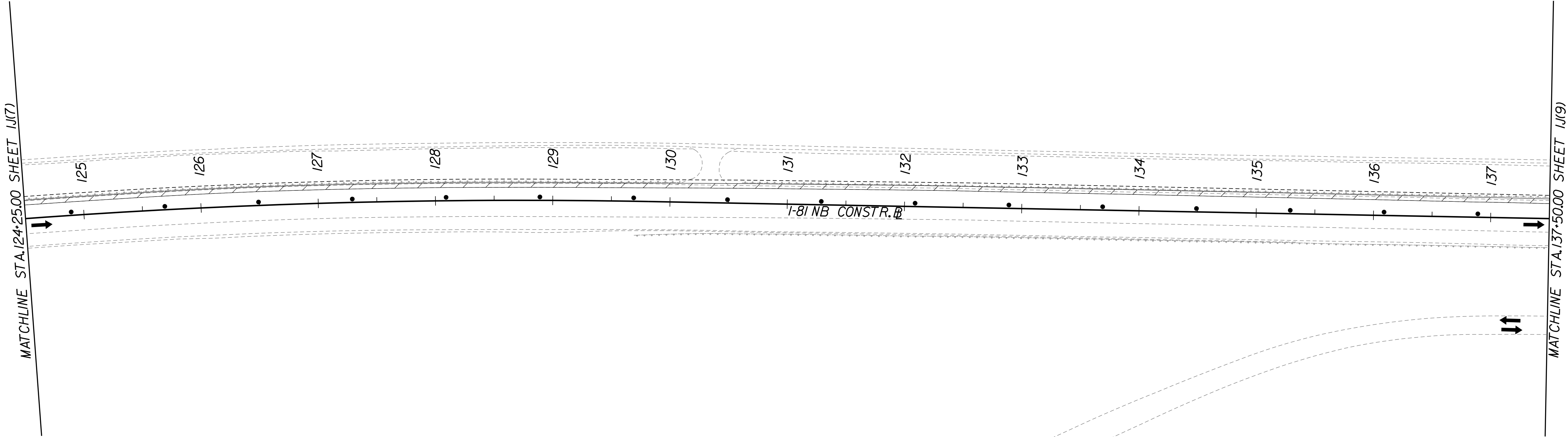
PROJECT MANAGER James Jones, L.S., (276) 696-3257 (Bristol)  
SURVEYED BY, DATE Woolpert Inc., (757) 549-3549 (Nov. 24, 2019)  
DESIGN BY Tamara Pritchard, P.E., (276) 696-3249 (Bristol)  
SUBSURFACE UTILITY BY, DATE Woolpert Inc., (757) 549-3549 (Nov. 24, 2019)

MAINTENANCE OF TRAFFIC -  
SEQUENCE OF CONSTRUCTION  
PHASE 1



| REVISED   | STATE | ROUTE | STATE PROJECT                 | SHEET NO. |
|---|-------|-------|-------------------------------|-----------|
|   |       |       |                               |           |
|   | VA.   | 81    | 0081-095-829, RW-201<br>C-501 | 1J(8)     |
| DESIGN FEATURES RELATING TO CONSTRUCTION OR TO REGULATION AND CONTROL OF TRAFFIC MAY BE SUBJECT TO CHANGE AS DEEMED NECESSARY BY THE DEPARTMENT |       |       |                               |           |
| PH PLANS  |       |       |                               |           |

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ACQUISITION OF RIGHT OF WAY.



MAINTENANCE OF TRAFFIC LEGEND

- AREA UNDER CONSTRUCTION (THIS PHASE)
- AREA PREVIOUSLY CONSTRUCTED
- TRAFFIC BARRIER SERVICE CONCRETE, ST'D. MB-11A
- GROUP 2 CHANNELIZING DEVICE
- CONSTRUCTION SIGN
- GROUP 2 CHANNELIZING DEVICE
- TRAFFIC FLOW ARROW
- IMPACT ATTENUATOR, TYPE 1, TL-3
- TYPE B WARNING LIGHT
- SHADOW VEHICLE WITH TMA

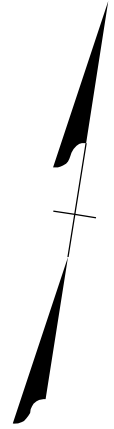
TEMPORARY PAVEMENT MARKING

- TYPE A 6" WHITE SOLID
- TYPE A 8" WHITE SOLID
- TYPE A 6" YELLOW SOLID
- TYPE A 8" YELLOW SOLID
- ONE-WAY TEMPORARY PAVEMENT MARKERS SHALL BE INSTALLED ON 20' CENTERS ON LANE SHIFT TAPERS



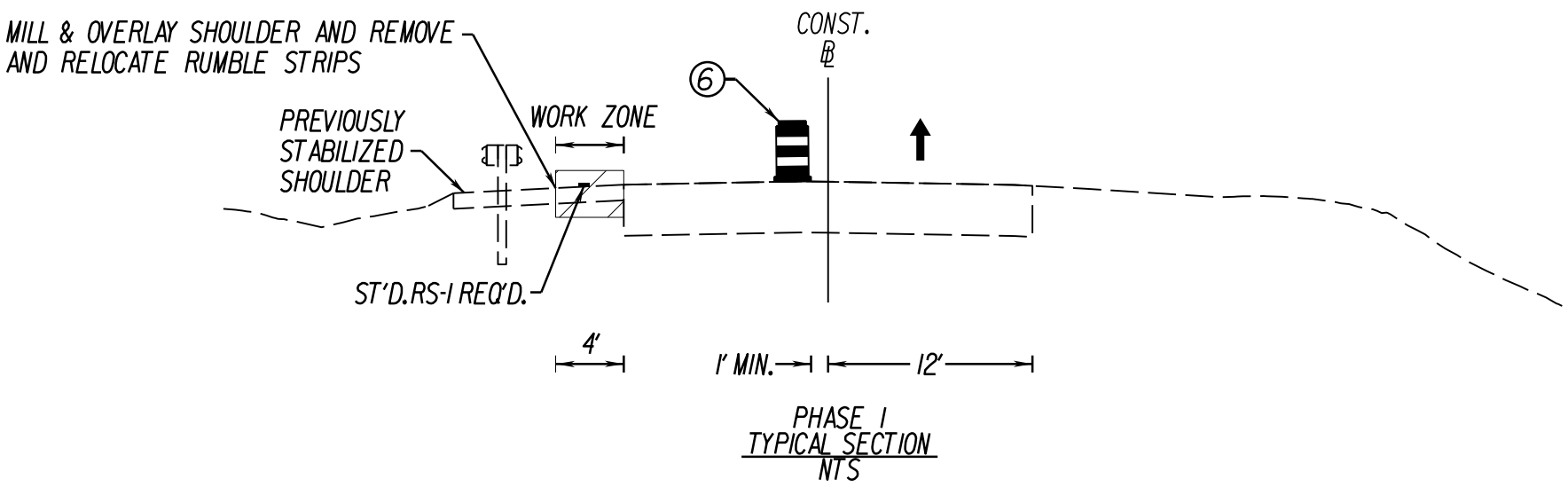
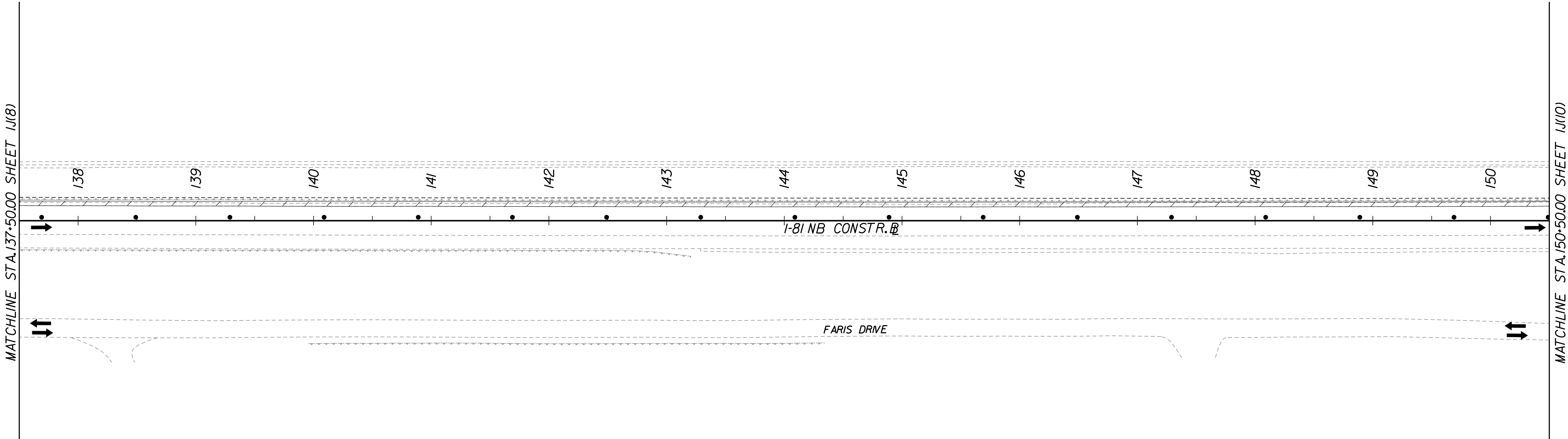
PROJECT MANAGER James Jones, L.S., (276) 696-3257, (Bristol)  
SURVEYED BY, DATE Woolpert Inc., (757) 549-3549 (Nov. 24, 2019)  
DESIGN BY Tamara Pritchard, P.E., (276) 696-3249 (Bristol)  
SUBSURFACE UTILITY BY, DATE Woolpert Inc., (757) 549-3549 (Nov. 24, 2019)

# MAINTENANCE OF TRAFFIC - SEQUENCE OF CONSTRUCTION PHASE 1



| REVISED   | STATE | ROUTE | STATE                         | SHEET NO. |
|---|-------|-------|-------------------------------|-----------|
|   |       |       | PROJECT                       |           |
|   | VA.   | 81    | 0081-095-829, RW-201<br>C-501 | 1J1(9)    |
| DESIGN FEATURES RELATING TO CONSTRUCTION OR TO REGULATION AND CONTROL OF TRAFFIC MAY BE SUBJECT TO CHANGE AS DEEMED NECESSARY BY THE DEPARTMENT |       |       |                               |           |
| PH PLANS  |       |       |                               |           |

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ACQUISITION OF RIGHT OF WAY.



## MAINTENANCE OF TRAFFIC LEGEND

AREA UNDER CONSTRUCTION (THIS PHASE)

AREA PREVIOUSLY CONSTRUCTED

⑤ TRAFFIC BARRIER SERVICE  
CONCRETE, ST'D. MB-IIA

⑥ GROUP 2 CHANNELIZING DEVICE

CONSTRUCTION SIGN

GROUP 2 CHANNELIZING DEVICE

TRAFFIC FLOW ARROW

IMPACT ATTENUATOR, TYPE I, TL-3

TYPE B WARNING LIGHT

SHADOW VEHICLE WITH TMA

## TEMPORARY PAVEMENT MARKING

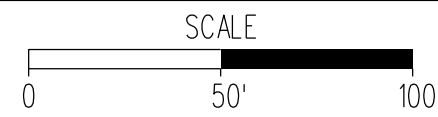
① TYPE A 6" WHITE SOLID

② TYPE A 8" WHITE SOLID

③ TYPE A 6" YELLOW SOLID

④ TYPE A 8" YELLOW SOLID

ONE-WAY TEMPORARY PAVEMENT  
MARKERS SHALL BE INSTALLED ON  
20' CENTERS ON LANE SHIFT TAPERS



PROJECT  
0081-095-829

SHEET NO.  
1J1(9)

PROJECT MANAGER James Jones, L.S., (276) 696-3257 (Bristol)  
SURVEYED BY, DATE Woolpert Inc., (757) 549-3549 (Nov. 24, 2019)  
DESIGN BY Tamara Pritchard, P.E., (276) 696-3249 (Bristol)  
SUBSURFACE UTILITY BY, DATE Woolpert Inc., (757) 549-3549 (Nov. 24, 2019)

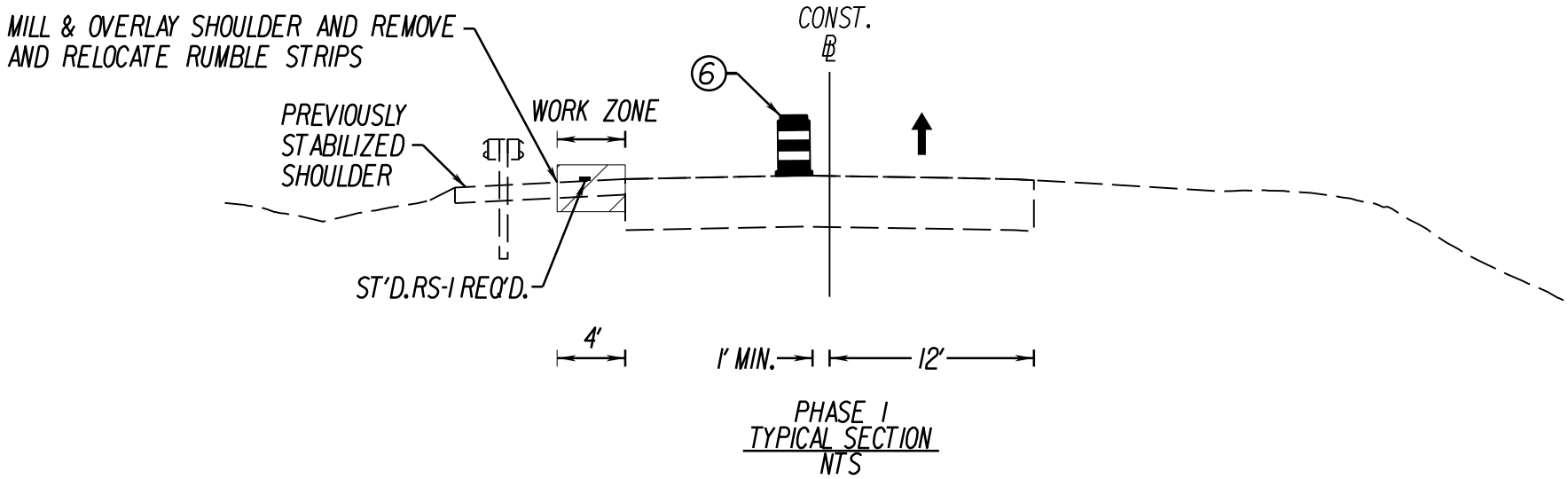
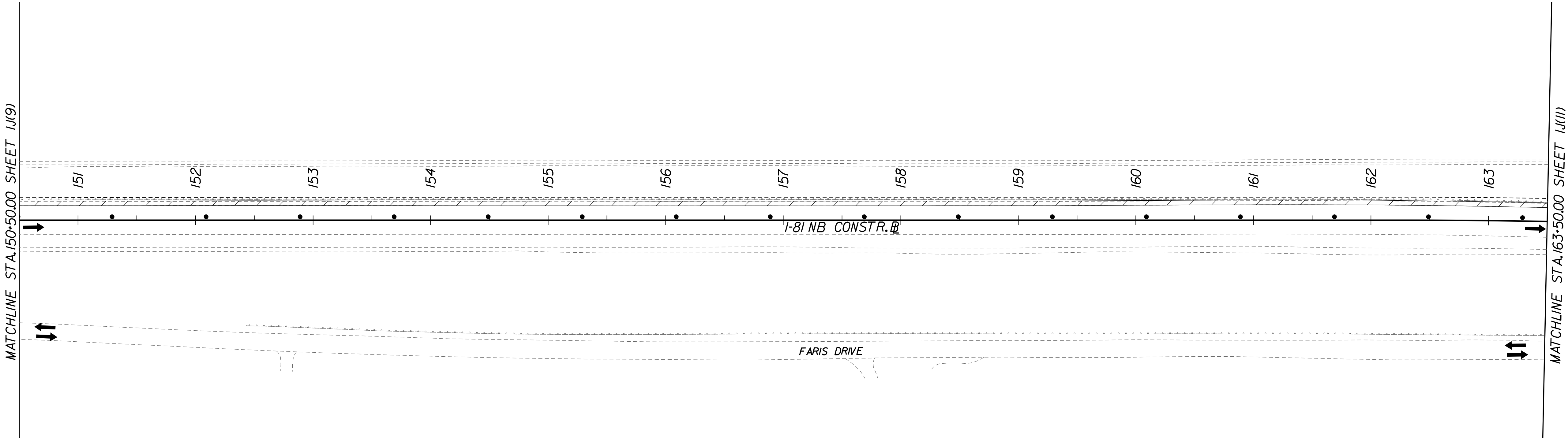
# MAINTENANCE OF TRAFFIC - SEQUENCE OF CONSTRUCTION PHASE 1



| REVISED   | STATE   | ROUTE | STATE PROJECT                 | SHEET NO. |
|---|---|-------|-------------------------------|-----------|
|   | VA.   | 81    | 0081-095-829, RW-201<br>C-501 | 1J(10)    |
| DESIGN FEATURES RELATING TO CONSTRUCTION OR TO REGULATION AND CONTROL OF TRAFFIC MAY BE SUBJECT TO CHANGE AS DEEMED NECESSARY BY THE DEPARTMENT |   |       |                               |           |
| VDOT Traffic<br>Bristol, Virginia<br>TRAFFIC ENGINEER   | VDOT Location & Design<br>Bristol, Virginia<br>ROADWAY ENGINEER |       |                               |           |

## PH PLANS

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### MAINTENANCE OF TRAFFIC LEGEND

- AREA UNDER CONSTRUCTION (THIS PHASE)
- AREA PREVIOUSLY CONSTRUCTED
- TRAFFIC BARRIER SERVICE CONCRETE, ST'D. MB-11A
- GROUP 2 CHANNELIZING DEVICE
- CONSTRUCTION SIGN
- GROUP 2 CHANNELIZING DEVICE
- TRAFFIC FLOW ARROW
- IMPACT ATTENUATOR, TYPE 1, TL-3
- TYPE B WARNING LIGHT
- SHADOW VEHICLE WITH TMA

### TEMPORARY PAVEMENT MARKING

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- ONE-WAY TEMPORARY PAVEMENT MARKERS SHALL BE INSTALLED ON 20' CENTERS ON LANE SHIFT TAPERS

PROJECT MANAGER James Jones, L.S., (276) 696-3257 (Bristol)  
SURVEYED BY, DATE Woolpert Inc., (757) 549-3549 (Nov. 24, 2019)  
DESIGN BY Tamara Pritchard, P.E., (276) 696-3249 (Bristol)  
SUBSURFACE UTILITY BY, DATE Woolpert Inc., (757) 549-3549 (Nov. 24, 2019)

# MAINTENANCE OF TRAFFIC - SEQUENCE OF CONSTRUCTION PHASE 1

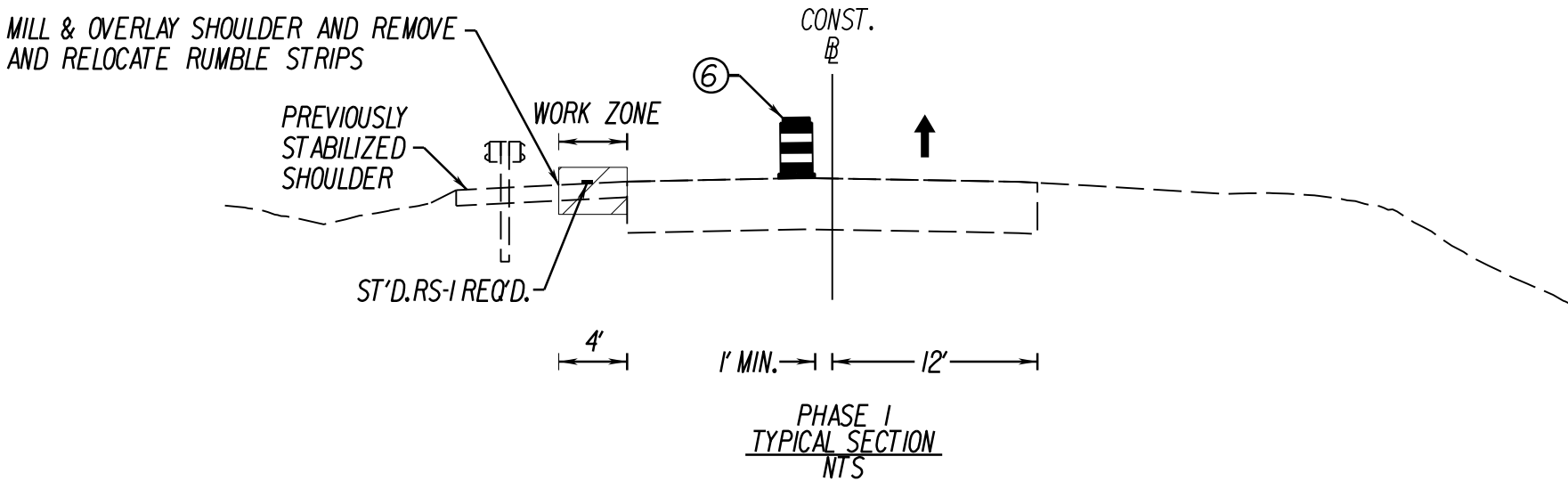
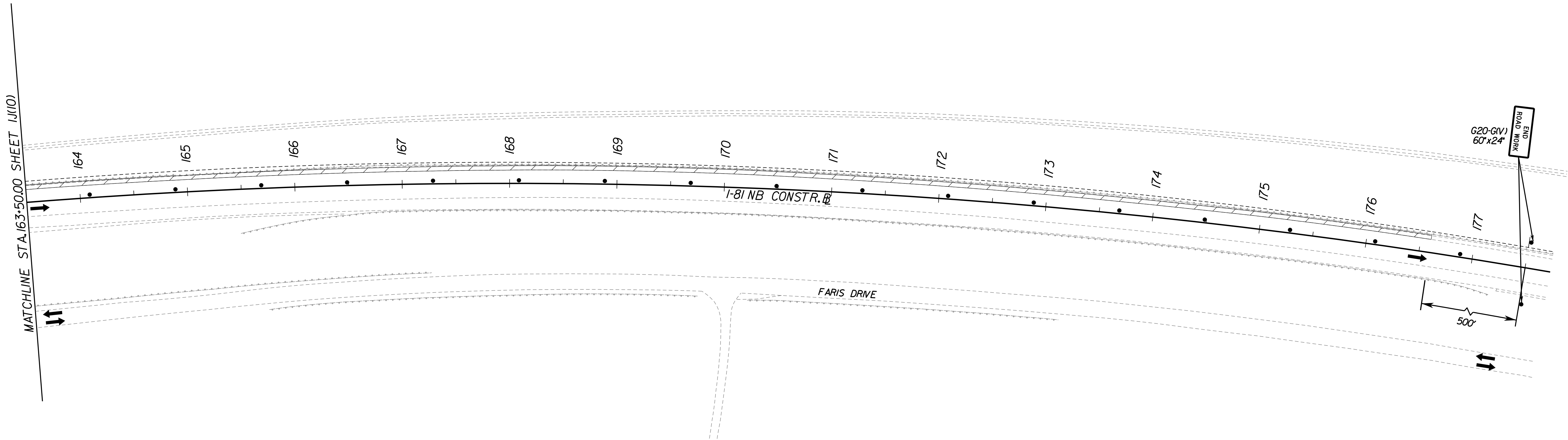


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Plotted By: elliley  
By Resolution of Highway Commission  
dated October 4, 1956

|  |   | REVISED  | STATE | STATE |                               | SHEET NO. |
|--|---|----------|-------|-------|-------------------------------|-----------|
|  |   |          |       | ROUTE | PROJECT                       |           |
|  |   |          | VA.   | 81    | 0081-095-829, RW-201<br>C-501 |           |
| DESIGN FEATURES RELATING TO CONSTRUCTION<br>OR TO REGULATION AND CONTROL OF TRAFFIC<br>MAY BE SUBJECT TO CHANGE AS DEEMED<br>NECESSARY BY THE DEPARTMENT |   |          |       |       |                               |           |
|  |   |          |       |       |                               |           |
| VDOT Traffic<br>Bristol, Virginia<br>TRAFFIC ENGINEER  | VDOT Location & Design<br>Bristol, Virginia<br>ROADWAY ENGINEER | PH PLANS |       |       |                               |           |

## PH PLANS

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### MAINTENANCE OF TRAFFIC LEGEND

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- AREA PREVIOUSLY CONSTRUCTED
- ⑤ TRAFFIC BARRIER SERVICE CONCRETE, ST'D. MB-IIA
- ⑥ GROUP 2 CHANNELIZING DEVICE
- CONSTRUCTION SIGN
- GROUP 2 CHANNELIZING DEVICE
- TRAFFIC FLOW ARROW
- IMPACT ATTENUATOR, TYPE 1, TL-3
- TYPE B WARNING LIGHT
- SHADOW VEHICLE WITH TMA

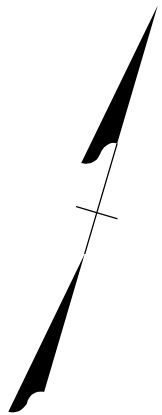
### TEMPORARY PAVEMENT MARKING

- ① TYPE A 6" WHITE SOLID
- ② TYPE A 8" WHITE SOLID
- ③ TYPE A 6" YELLOW SOLID
- ④ TYPE A 8" YELLOW SOLID
- ONE-WAY TEMPORARY PAVEMENT MARKERS SHALL BE INSTALLED ON 20' CENTERS ON LANE SHIFT TAPERS

| SCALE      | PROJECT      | SHEET NO. |
|------------|--------------|-----------|
| 0 50' 100' | 0081-095-829 | IJ(11)    |

PROJECT MANAGER James Jones, L.S., (276) 696-3257, (Bristol)  
SURVEYED BY, DATE Woolpert Inc., (757) 549-3549 (Nov. 24, 2019)  
DESIGN BY Tamara Pritchard, P.E., (276) 696-3249 (Bristol)  
SUBSURFACE UTILITY BY, DATE Woolpert Inc., (757) 549-3549 (Nov. 24, 2019)

MAINTENANCE OF TRAFFIC -  
SEQUENCE OF CONSTRUCTION  
PHASE 2



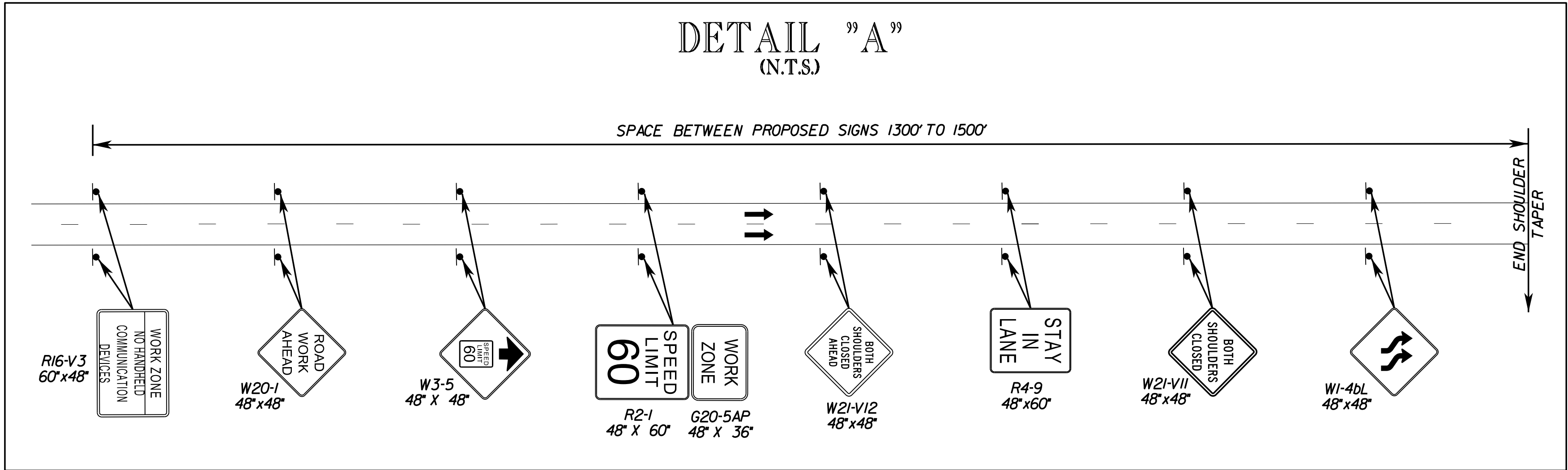
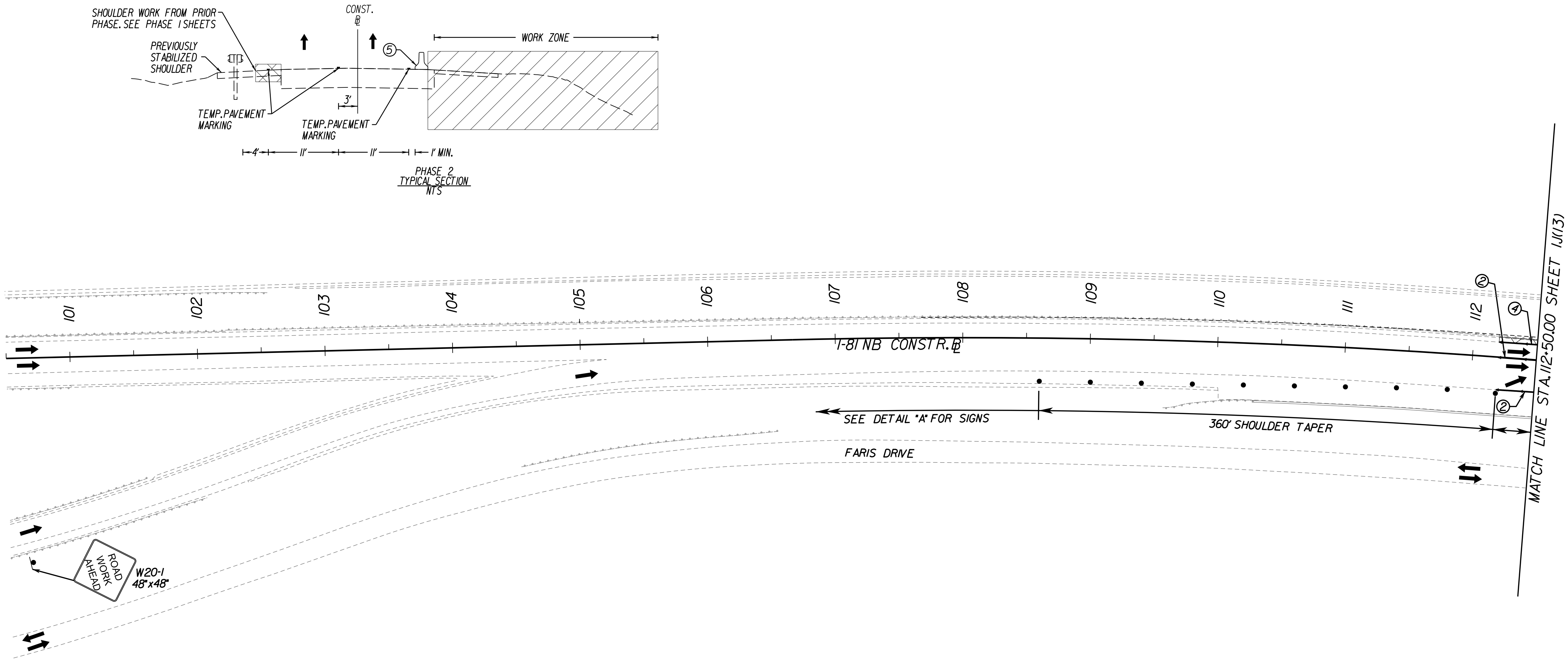
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|---|---|---------|-------|-------|-------------------------------|-----------|
| VDOT Traffic<br>Bristol, Virginia<br>TRAFFIC ENGINEER | VDOT Location & Design<br>Bristol, Virginia<br>ROADWAY ENGINEER | REVISED | STATE | ROUTE | STATE PROJECT                 | SHEET NO. |
|   |   |         | VA.   | 81    | 0081-095-829, RW-201<br>C-501 | 1J(12)    |

By Resolution of Highway Commission  
dated October 4, 1956

DESIGN FEATURES RELATING TO CONSTRUCTION  
OR TO REGULATION AND CONTROL OF TRAFFIC  
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PH PLANS

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OF CONSTRUCTION OR THE  
ACQUISITION OF RIGHT OF WAY.

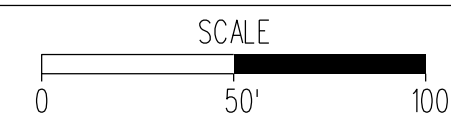


MAINTENANCE OF TRAFFIC LEGEND

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- AREA PREVIOUSLY CONSTRUCTED
- TRAFFIC BARRIER SERVICE CONCRETE, ST'D. MB-IIA
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- SHADOW VEHICLE WITH TMA

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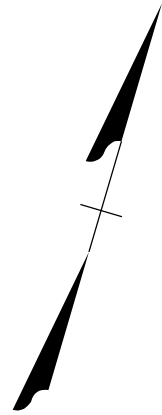
PROJECT  
0081-095-829

SHEET NO.  
1J(12)



PROJECT MANAGER James Jones, L.S., (276) 696-3257, (Bristol)  
SURVEYED BY, DATE Woolpert Inc., (757) 549-3549 (Nov. 24, 2019)  
DESIGN BY Tamara Pritchard, P.E., (276) 696-3249 (Bristol)  
SUBSURFACE UTILITY BY, DATE Woolpert Inc., (757) 549-3549 (Nov. 24, 2019)

MAINTENANCE OF TRAFFIC -  
SEQUENCE OF CONSTRUCTION  
PHASE 2



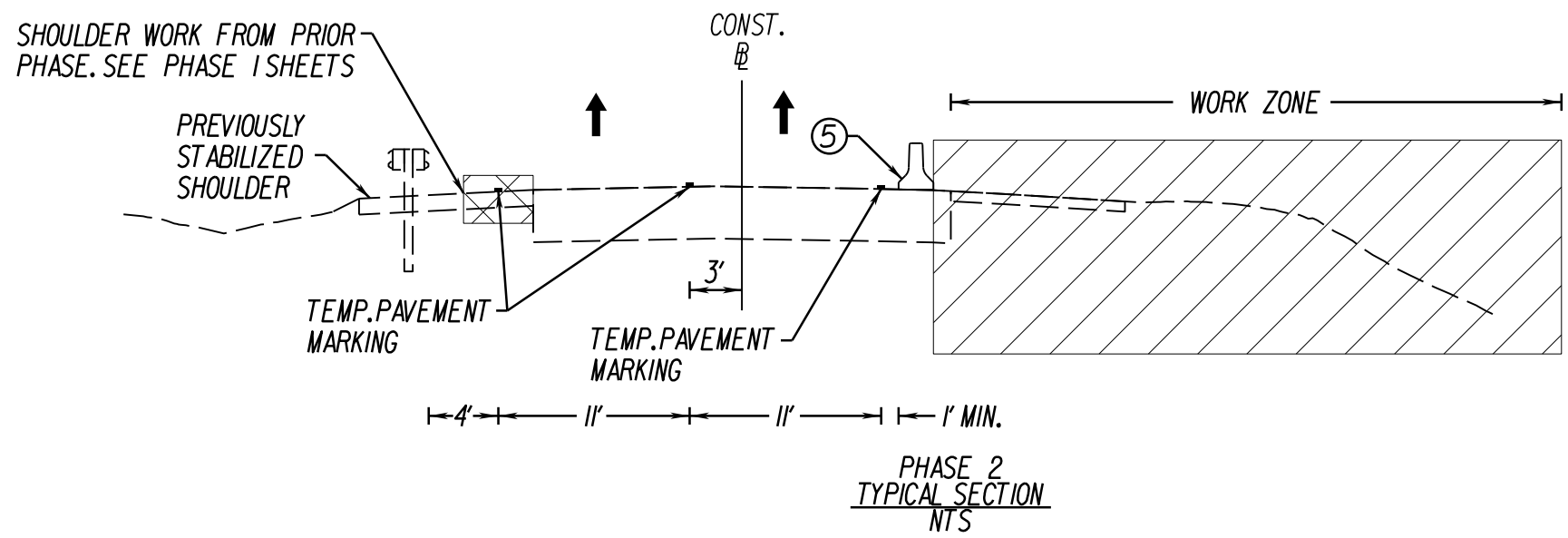
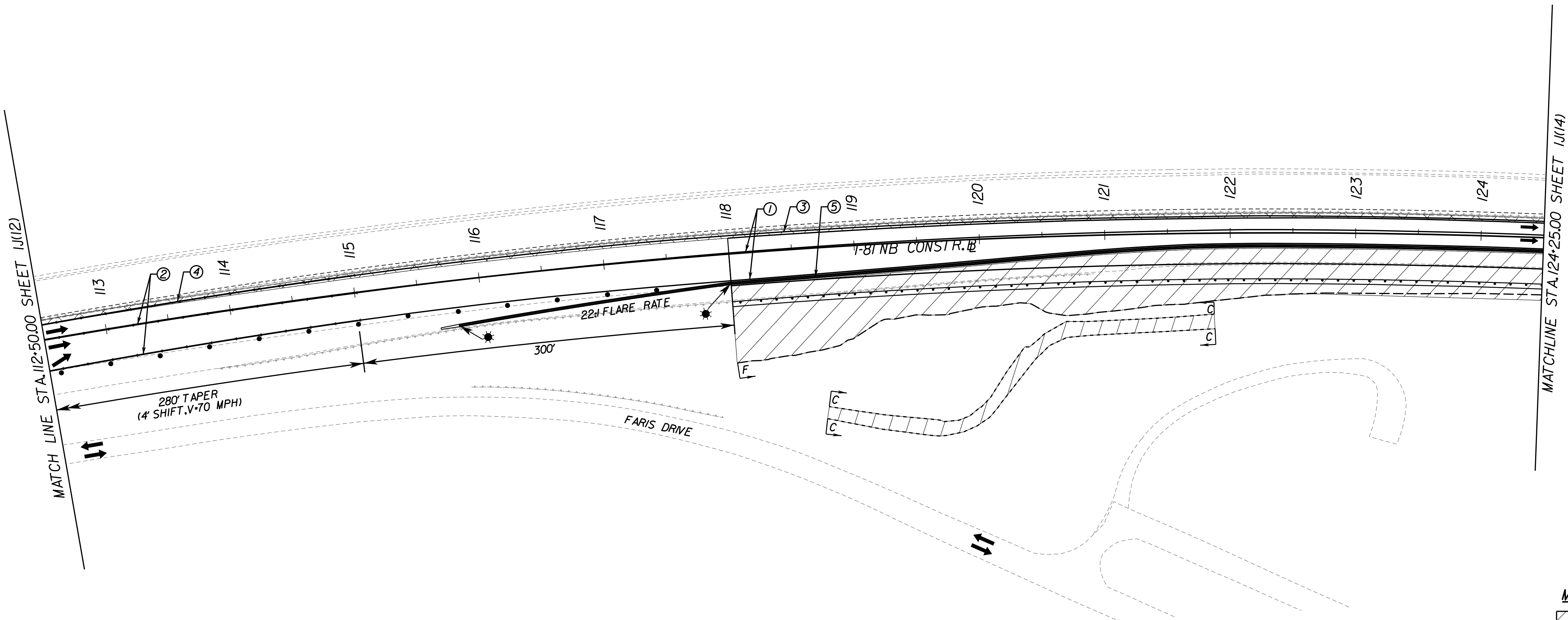
|   |   |
|---|---|
|   |   |
| VDOT Traffic<br>Bristol, Virginia<br>TRAFFIC ENGINEER | VDOT Location & Design<br>Bristol, Virginia<br>ROADWAY ENGINEER |

|                        |       |       |                               |  |
|------------------------|-------|-------|-------------------------------|--|
| LIMITED ACCESS HIGHWAY |       |       |                               | By Resolution of Highway Commission<br>dated October 4, 1956 |
| REVISED                | STATE | ROUTE | STATE PROJECT                 | SHEET NO.  |
|                        | VA.   | 81    | 0081-095-829, RW-201<br>C-501 | 1J(13)   |

DESIGN FEATURES RELATING TO CONSTRUCTION  
OR TO REGULATION AND CONTROL OF TRAFFIC  
MAY BE SUBJECT TO CHANGE AS DEEMED  
NECESSARY BY THE DEPARTMENT

PH PLANS

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- SHADOW VEHICLE WITH TMA

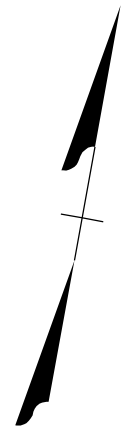
TEMPORARY PAVEMENT MARKING

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|                     |                         |                     |
|---------------------|-------------------------|---------------------|
| SCALE<br>0 50' 100' | PROJECT<br>0081-095-829 | SHEET NO.<br>1J(13) |
|---------------------|-------------------------|---------------------|

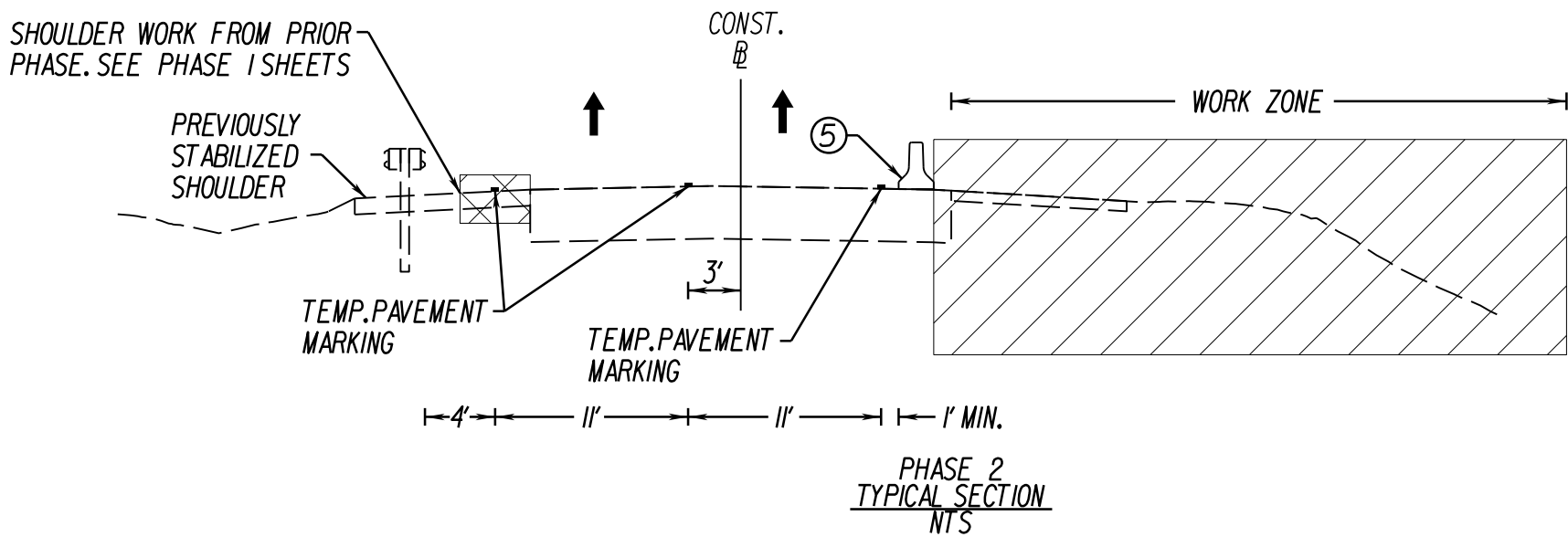
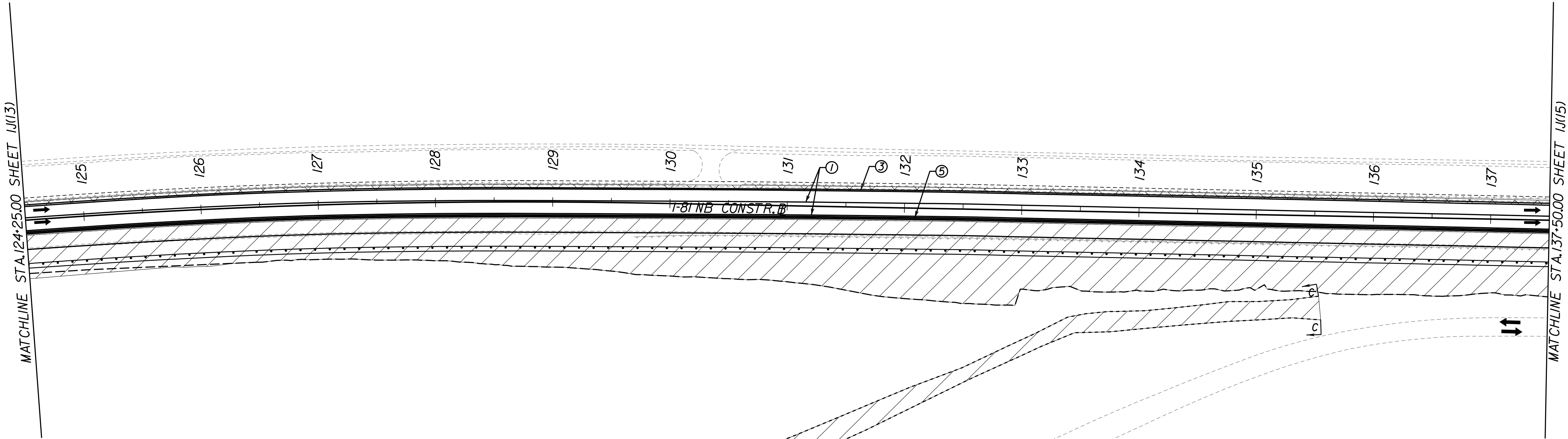
PROJECT MANAGER James Jones, L.S., (276) 696-3257, (Bristol)  
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SUBSURFACE UTILITY BY, DATE Woolpert Inc., (757) 549-3549 (Nov. 24, 2019)

MAINTENANCE OF TRAFFIC -  
SEQUENCE OF CONSTRUCTION  
PHASE 2



dl16156001.j1(14).dgn  
Plotted By: elliey  
By Resolution of Highway Commission dated October 4, 1956  
LIMITED ACCESS HIGHWAY

| REVISED   | STATE | ROUTE   | STATE PROJECT                 | SHEET NO. |
|---|-------|---|-------------------------------|-----------|
|   |       |   |                               |           |
|   | VA.   | 81  | 0081-095-829, RW-201<br>C-501 | 1J(14)    |
| DESIGN FEATURES RELATING TO CONSTRUCTION OR TO REGULATION AND CONTROL OF TRAFFIC MAY BE SUBJECT TO CHANGE AS DEEMED NECESSARY BY THE DEPARTMENT |       |   |                               |           |
| PH PLANS  |       |   |                               |           |
| THESE PLANS ARE UNFINISHED AND UNAPPROVED AND ARE NOT TO BE USED FOR ANY TYPE OF CONSTRUCTION OR THE ACQUISITION OF RIGHT OF WAY.               |       |   |                               |           |
| VDOT Traffic<br>Bristol, Virginia<br>TRAFFIC ENGINEER   |       | VDOT Location & Design<br>Bristol, Virginia<br>ROADWAY ENGINEER |                               |           |



TEMPORARY PAVEMENT MARKING

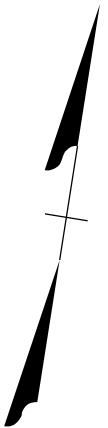
- ① TYPE A 6" WHITE SOLID
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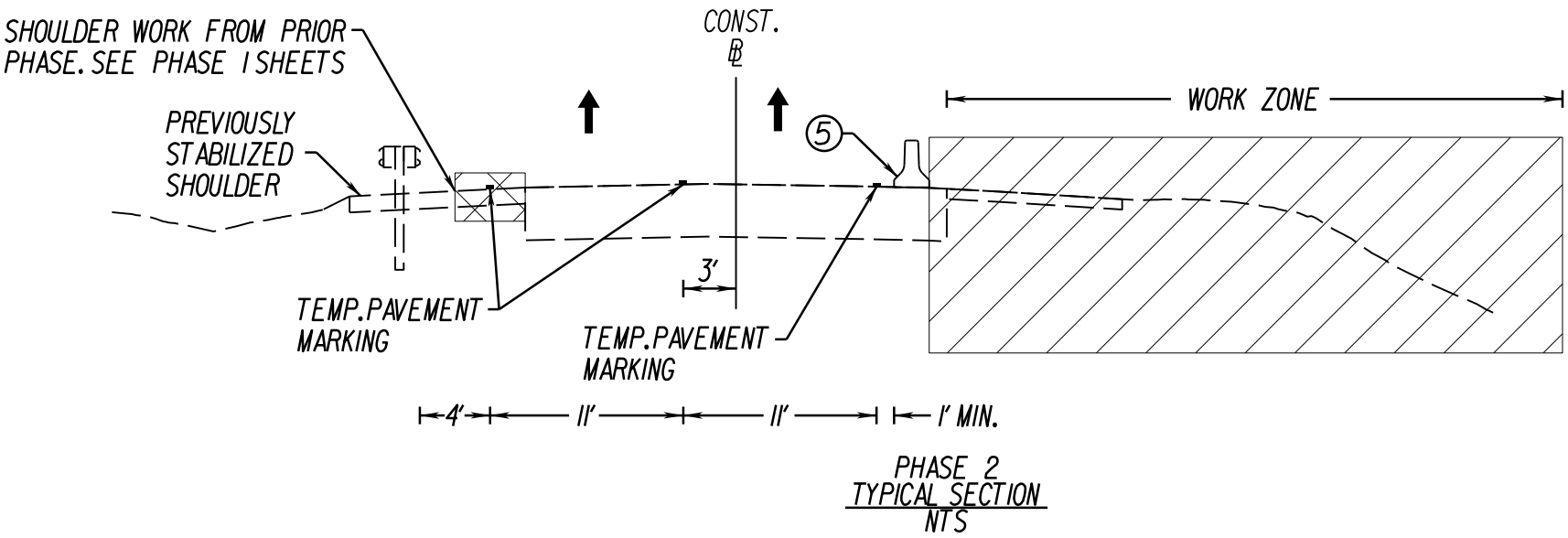
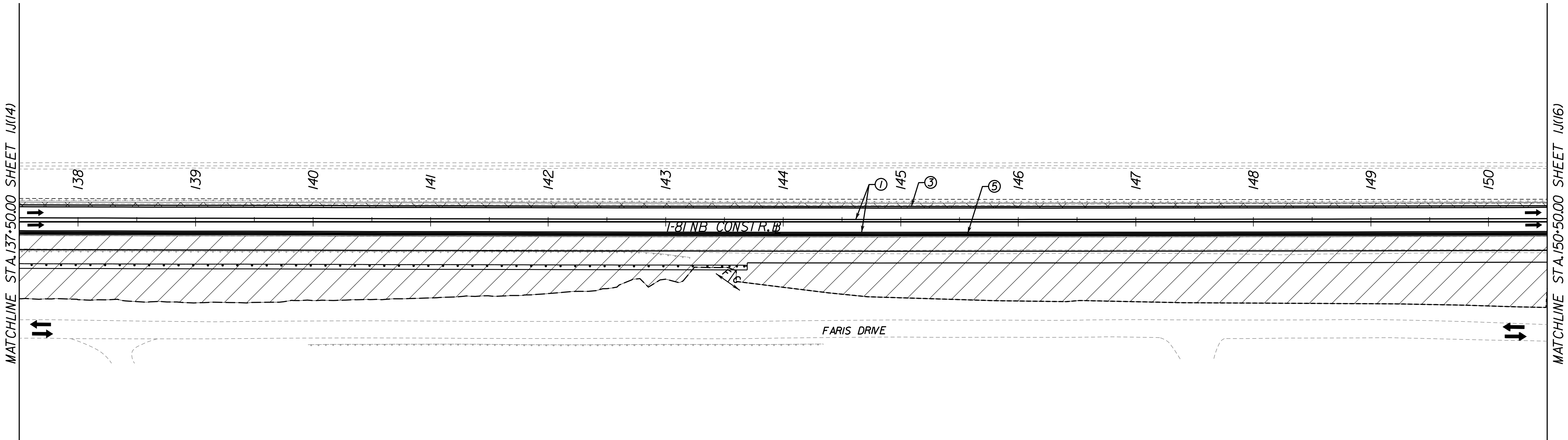
MAINTENANCE OF TRAFFIC -  
SEQUENCE OF CONSTRUCTION  
PHASE 2



| REVISED  | STATE | ROUTE   | STATE                         | SHEET NO. |
|--|-------|---|-------------------------------|-----------|
|  |       |   | PROJECT                       |           |
|  | VA.   | 81  | 0081-095-829, RW-201<br>C-501 | IJ(15)    |
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| VDOT Traffic<br>Bristol, Virginia<br>TRAFFIC ENGINEER  |       | VDOT Location & Design<br>Bristol, Virginia<br>ROADWAY ENGINEER |                               |           |

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MAINTENANCE OF TRAFFIC LEGEND

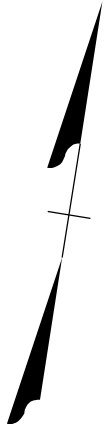
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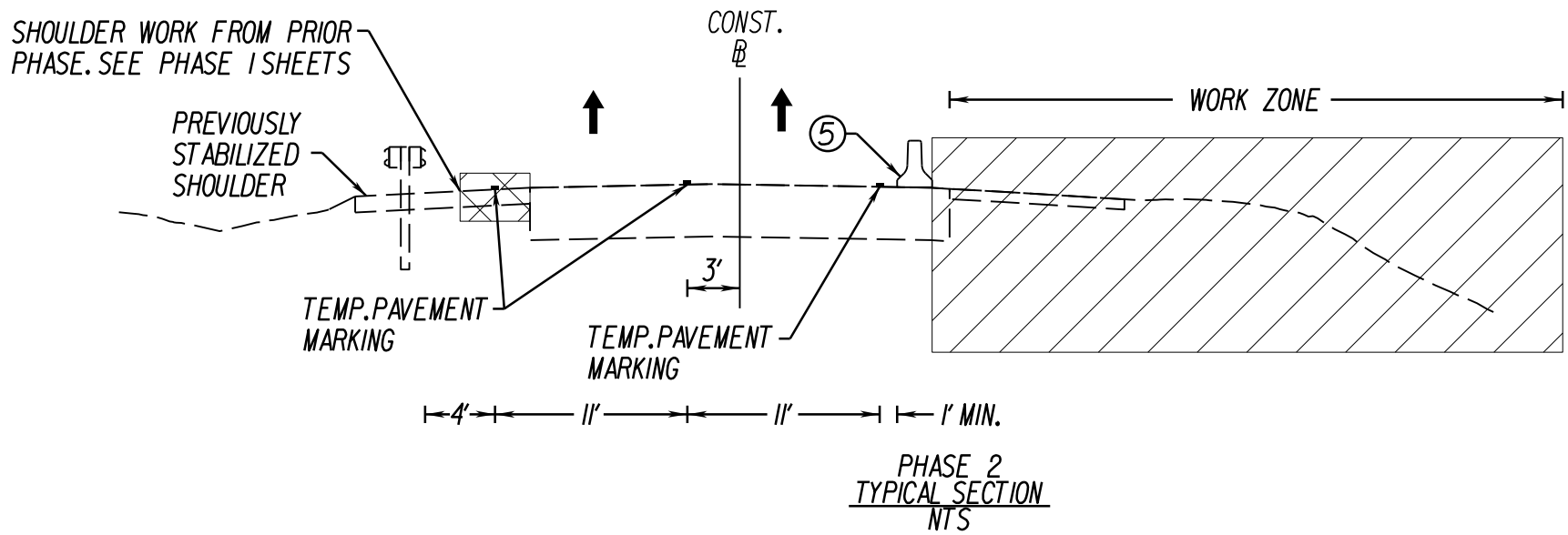
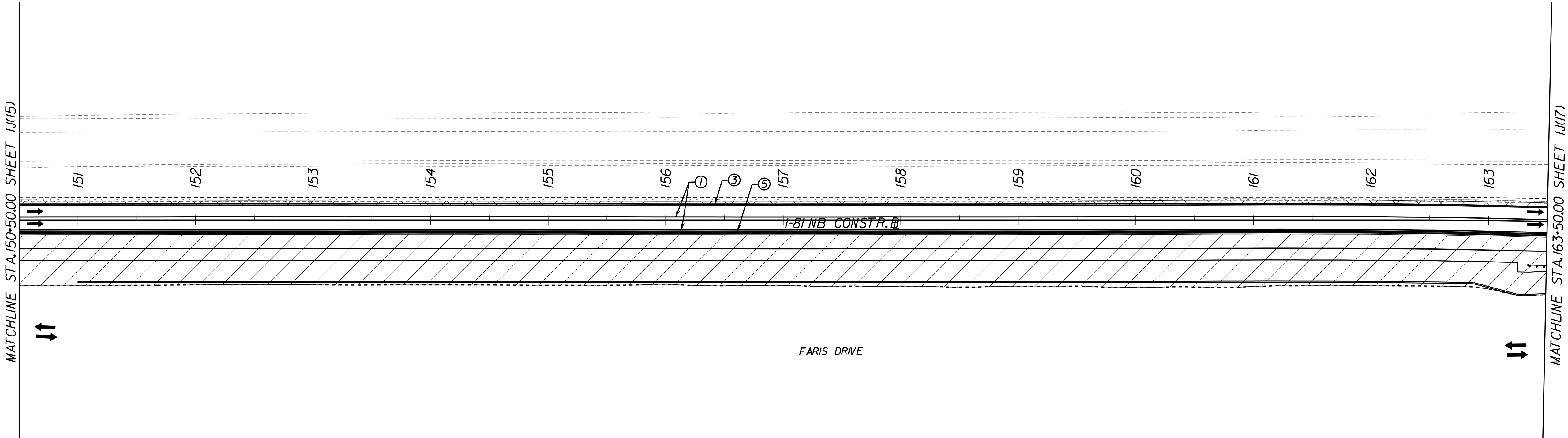
# MAINTENANCE OF TRAFFIC - SEQUENCE OF CONSTRUCTION PHASE 2



| REVISED   | STATE | ROUTE   | STATE PROJECT              | SHEET NO. |
|---|-------|---|----------------------------|-----------|
|   |       |   |                            |           |
|   | VA.   | 81  | 0081-095-829, RW-201 C-501 | 1J(16)    |
| DESIGN FEATURES RELATING TO CONSTRUCTION OR TO REGULATION AND CONTROL OF TRAFFIC MAY BE SUBJECT TO CHANGE AS DEEMED NECESSARY BY THE DEPARTMENT |       |   |                            |           |
| VDOT Traffic<br>Bristol, Virginia<br>TRAFFIC ENGINEER   |       | VDOT Location & Design<br>Bristol, Virginia<br>ROADWAY ENGINEER |                            |           |

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BRISTOL DISTRICT DESIGN UNIT

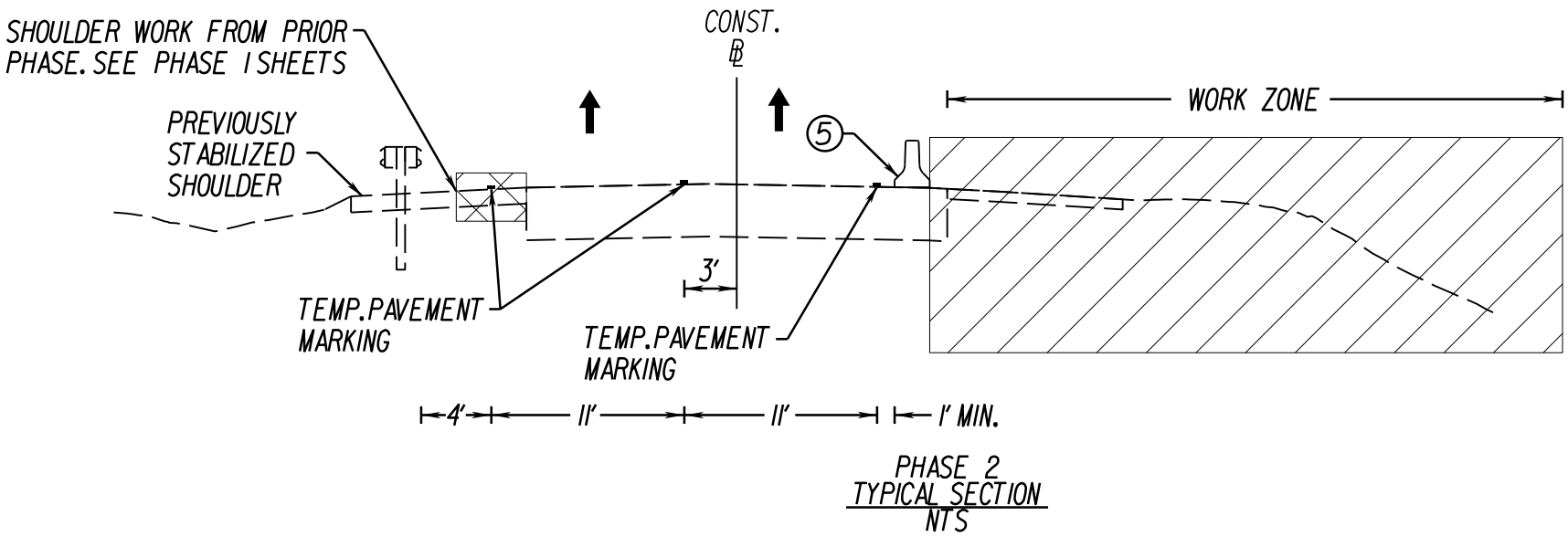
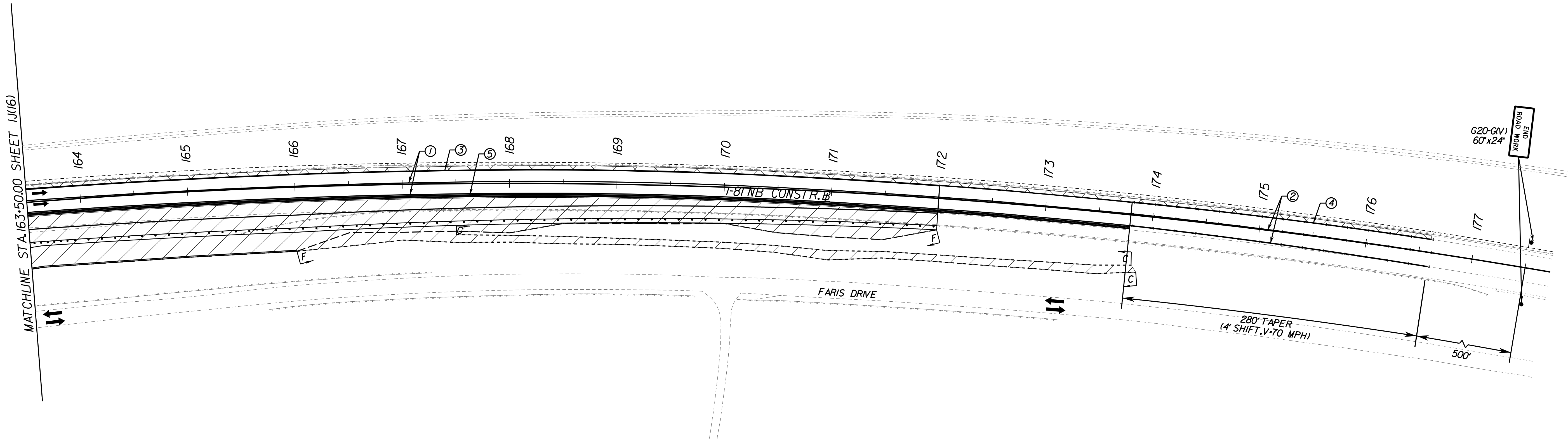
PROJECT MANAGER James Jones, L.S., (276) 696-3257 (Bristol)  
SURVEYED BY, DATE Woolpert Inc., (757) 549-3549 (Nov. 24, 2019)  
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SUBSURFACE UTILITY BY, DATE Woolpert Inc., (757) 549-3549 (Nov. 24, 2019)

# MAINTENANCE OF TRAFFIC - SEQUENCE OF CONSTRUCTION PHASE 2



## PH PLANS

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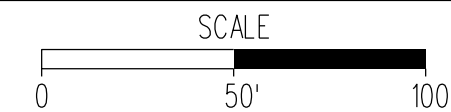
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ONE-WAY TEMPORARY PAVEMENT  
MARKERS SHALL BE INSTALLED ON  
20' CENTERS ON LANE SHIFT TAPERS



PROJECT  
0081-095-829

SHEET NO.  
1J(17)



PROJECT MANAGER James Jones, L.S., (276) 696-3257, (Bristol)  
SURVEYED BY, DATE Woolpert Inc., (757) 549-3549 (Nov. 24, 2019)  
DESIGN BY Tamara Pritchard, P.E., (276) 696-3249 (Bristol)  
SUBSURFACE UTILITY BY, DATE Woolpert Inc., (757) 549-3549 (Nov. 24, 2019)

# GENERAL NOTES

| REVISED | STATE | ROUTE | STATE                         | SHEET NO. |
|---------|-------|-------|-------------------------------|-----------|
|         |       |       | PROJECT                       |           |
|         | VA.   | 81    | 0081-095-829, RW-201<br>C-501 | 2         |

DESIGN FEATURES RELATING TO CONSTRUCTION  
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## GRADING

- G-1 The grade line denotes top of finished pavement unless shown otherwise on typical sections or plans.
- G-3 Earthwork quantities on this project are based on anticipated settlement and may require adjusting during construction. Payment will be made only for quantities actually moved.
- G-4 The cost of removal of all existing concrete items located in the area to be graded, including, but not limited to the following, shall be included in the price bid for regular excavation: -
- G-6 The borrow material for this project shall be a minimum CBR 5 or as approved by the Materials Engineer.

## DRAINAGE

- D-1 The horizontal location of all drainage structures shown on these plans is approximate only, with the exception of structures showing specific stations, special design bridges and storm sewer systems.
- D-2 The horizontal location and invert elevations shown for proposed culverts and storm sewer outfall pipes are based on existing survey data and required design criteria. If during construction, it is found that the horizontal location or invert elevations shown on the plans differ significantly from the horizontal location or elevations of the stream or swale in which the culvert or storm sewer outfall pipe is to be placed, the Engineer shall confer with, and get approval from, the applicable District Drainage Engineer before installing the culvert or storm sewer outfall pipe.
- D-3 The "H" dimensions shown on plans for drop inlets and junction boxes and the "L.F." dimensions shown for manholes are for estimating purposes and are based on the proposed invert elevations shown for the structure and the anticipated top (rim) elevation based on existing or proposed finished grade. The actual "H" or "L.F." dimensions are to be determined by the contractor from field conditions.
- D-6 Pipes shall conform to any of the allowable types shown on sheet number \_\_\_\_\_, within the applicable height of cover limitations. For strength, sheet thickness, or class designation; available sizes; height of cover limitations; and other restrictions for a particular pipe type or height of cover, see the VDOT Road and Bridge Standard PC-1. Structural plate pipe may be substituted for corrugated pipe of the same size, provided the substitution complies with the applicable sections of the VDOT Road and Bridge Standards PC-1.
- D-10 The proposed riprap may be omitted by the Engineer if the slope designated for placement of riprap is found to be comprised of solid rock or closely consolidated boulders with soundness, size and weight equal to, or exceeding, the specifications for the proposed riprap.
- D-13 Existing drainage facilities being utilized as a part of the drainage system, and designated on the plans "To Be Cleaned Out" shall be cleaned as directed by the Engineer. The cost incidental to this shall be included in the contract price for other items.
- D-14 Proposed drop inlets with a height (H) less than the standard minimum shown in the VDOT Road and Bridge Standards shall be considered and paid for as Standard Drop Inlets for the type specified. Pipes with less than standard minimum finished height of cover shall be noted as such in the drainage description for the pipe. Specific pipe bedding and cover requirements are provided in the applicable PB-1 and PC-1 standard drawings of the VDOT Road and Bridge Standards.
- D-17 St'd. SL-1 Safety Slab locations are based on the assumed use of precast structures. If cast-in-place structures are utilized, and the interior chamber dimensions (length and width, or diameter) are less than 4 feet, the safety slabs shall not be installed.

## PAVEMENT

- P-2 The pavement materials on this project will be paid for on a tonnage basis. The weight will vary in accordance with the specific gravity of the aggregates and the asphaltic content of the mix actually used to secure the design depth. The weight of the asphalt concrete is based on 95% of the theoretical maximum density.

## INCIDENTALS

- I-7 Where Standard slope roundoffs would damage trees, bushes or other desirable vegetation, they shall be omitted when so ordered by the Engineer.
- I-8A Clearing and grubbing shall be confined to those areas needed for construction. No trees or shrubs in ungraded areas shall be cut without the permission of the Engineer.

- I-14 Salvaged guardrail materials not used in the new construction shall become the property of the Contractor and shall be disposed of at a licensed landfill, recycled or be retained by the Contractor.

- I-17 For method of constructing Straight-Line Taper Lanes in curb and/or curb and gutter sections, see typical details on Sheet 2A.

- I-18 All pavement markings and traffic flow arrows shown on the roadway construction plans are schematic only. The actual location and application of pavement markings shall be in accordance with Section 704 of the applicable VDOT Road and Bridge Specifications, MUTCD, sequence of construction/traffic control plans, pavement marking plan sheets \_\_\_ thru \_\_\_ and as directed by the Engineer.

- I-19 The following outside sources, under contract with VDOT, have provided information on this project.

Utility Design - " " " " "

If questions or problems arise during construction, please contact the Area Construction Engineer. DO NOT CONTACT THE OUTSIDE SOURCES.

- I-20 The Official Electronic PDF Version of the plans will override the paper copies or prints of specific layers.

Portions of this plan assembly have been CADD generated. To assist in the preparation of the bid and construction of the project, Microstation format (.dgn) files will be made available to the prime contractor during bids and after award of the contract.

- I-21 All electronic plan assemblies will include the construction plans in two formats: PDF files and MicroStation format (.dgn) files. Only the PDF files will be considered as part of the official plan assembly.

The MicroStation format (.dgn) files are furnished only as information for the contractor. These plans are developed in layers (levels) to aid in readability. (See the VDOT CADD Manual for CADD Level Structure). However, the construction items may or may not be in the proper layering scheme as described in the VDOT CADD Manual. The Microstation files will only match the scanned files if all required levels are turned on. A Microstation Software license is required to be able to read these files.

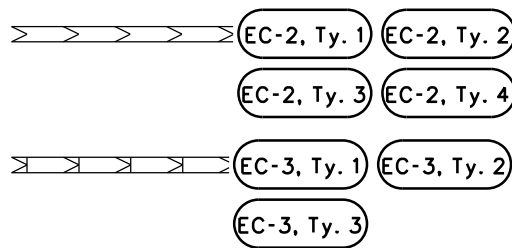
NOTE: Existing shoulder material comprised of stone cannot be used on the exterior portion of proposed slopes.

## EROSION AND SEDIMENT CONTROL (ESC)

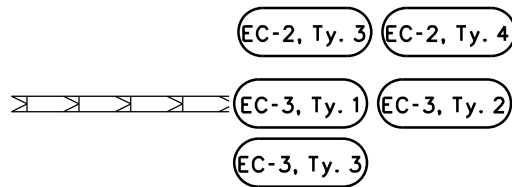
- E-1 If the removal of Brush Silt Barrier is specified by the plans or required by the Engineer, the cost of removal and disposal of brush shall be in accordance with Section 109 of the applicable VDOT Road and Bridge Specifications.

- E-2 Rock for Check Dams, Inlet Protection, Erosion Control Stone and Riprap shall be in accordance with Section 203 and Section 414 of the applicable VDOT Road and Bridge Specifications.

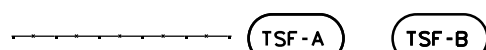
- E-3 The following symbols are used to depict Erosion Control items in the plan assembly:



Denotes Rolled Erosion Control Product, Temporary, St'd. EC-2 Type 1, 2, 3 or 4



Denotes Rolled Erosion Control Product, Permanent, St'd. EC-3 Type 1, 2 or 3



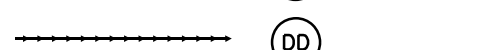
Denotes Temporary Silt Fence, St'd EC-5 Type A or B



Denotes Temporary Check Dam, St'd EC-16



Denotes Temporary Diversion Channel, St'd EC-12



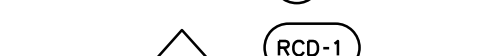
Denotes Temporary Diversion Dike, St'd EC-9



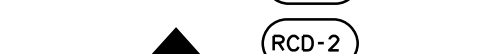
Denotes Turbidity Curtain, Type - Impervious



Denotes Turbidity Curtain, Type - Pervious



Denotes Rock Check Dam, Type I; St'd EC-4



Denotes Rock Check Dam, Type II; St'd EC-4



Denotes Inlet Protection, Type A; St'd EC-6



Denotes Inlet Protection, Type B; St'd EC-6



Denotes Slope Interrupter; St'd EC-15

- E-4 Permanent vegetation shall be established on all denuded areas not otherwise stabilized with non-erodible materials. See the Roadside Development sheet for details on permanent vegetation establishment.

## I-81 CONSTRUCTABILITY PLAN REVIEW TEAM MEMBERS

Marty Holloway - Construction  
Brian Plummer - Construction  
Clay Stowers - Materials  
Bill Lester - Materials  
Jeremy Mullins - Traffic  
George Young - Environmental  
Dennis Sanders - Environmental  
Richard Buckingham - Hydraulics  
Josh Lewis - Hydraulics  
David Duncan - Right of Way  
Josh Sproles - Utilities

## STORMWATER MANAGEMENT

- S-1 CLEARING AND GRUBBING OF SWM BASIN SITE - The area where the dam is to be constructed and the area upstream of the dam, to an elevation equal to the crest of the dam (maximum ponded water elevation), shall be cleared and grubbed in accordance with Section 301 of the applicable VDOT Road and Bridge Specifications.

- S-2 SWM BASIN DAM CONSTRUCTION - The dam for detention basins (no permanent pool) shall conform to the details contained in the plans and shall be constructed in accordance with Section 303 of the applicable VDOT Road and Bridge Specifications. The native material on which the dam will set shall meet the specifications for AASHTO Type A-4 or finer material. Where the native material does not meet this requirement, the area beneath the dam is to be excavated a minimum of 4' and backfilled with a material meeting the AASHTO Type A-4 or finer classification unless otherwise specified in the plans. The material used for the embankment of the dam shall be AASHTO Type A-4 or finer or otherwise specified in the plans. Dams with foundation and embankment material not meeting the above requirements or dams greater than 15' in height, or dams for retention basins (permanent pool) shall incorporate a membrane-lined trench, a homogenous embankment with seepage controls, a zoned embankment or other such approved designs as specified in the plans.

- S-3 SWM BASIN OUTLET PIPE - The pipe culvert under or through the dam for detention basins (no permanent pool) shall be reinforced concrete pipe with rubber gaskets in accordance with Section 232 and 212 of the applicable VDOT Road and Bridge Specifications. A concrete cradle shall extend the full length of the pipe culvert in accordance with the Standard Drawings. The connection between the pipe culvert and the SWM-1 Drainage Structure (or other control structure) shall be made watertight as approved by the Engineer and the cost shall be included in the price bid for pipe.

- S-4 The SWM-1 Drainage Structure (or other control structure) shall have 4" high numbers and 1" wide stripes painted at 1' intervals as shown on the Standard Drawings or detail sheets. The numbers and stripes are to be installed at the time of the initial installation of the SWM-1 Drainage Structure (or other control structure). Paint and application shall be in accordance with Section 231 and 411 of the applicable VDOT Road and Bridge Specifications and the cost is to be included in the price bid for the applicable structure.

- S-4 The SWM-1 Drainage Structure (or other control structure) shall have 4" high numbers and 1" wide stripes painted at 1' intervals as shown on the Standard Drawings or detail sheets. The numbers and stripes are to be installed at the time of the initial installation of the SWM-1 Drainage Structure (or other control structure). Paint and application shall be in accordance with Section 231 and 411 of the applicable VDOT Road and Bridge Specifications and the cost is to be included in the price bid for the applicable structure.

## PH PLANS

THESE PLANS ARE UNFINISHED  
AND UNAPPROVED AND ARE NOT  
TO BE USED FOR ANY TYPE  
OF CONSTRUCTION OR THE  
ACQUISITION OF RIGHT OF WAY.

|  |              |           |
|--|--------------|-----------|
|  | PROJECT      | SHEET NO. |
|  | 0081-095-829 | 2         |

PROJECT MANAGER James Jones, L.S., (276) 696-3257 (Bristol)  
SURVEYED BY, DATE Woolpert Inc., (757) 549-3549 (Nov. 24, 2019)  
DESIGN BY Tamara Pritchard, P.E., (276) 696-3249 (Bristol)  
SUBSURFACE UTILITY BY, DATE Woolpert Inc., (757) 549-3549 (Nov. 24, 2019)

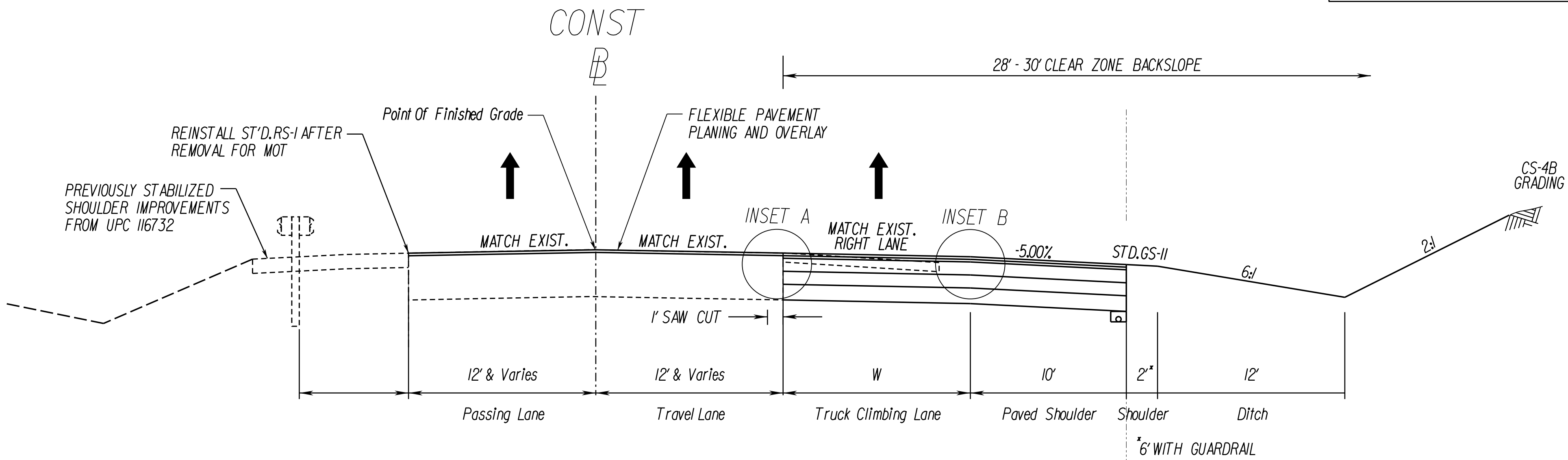
# TYPICAL SECTIONS

MAINLINE I-81 NB  
INTERSTATE SYSTEM (GS-INT)

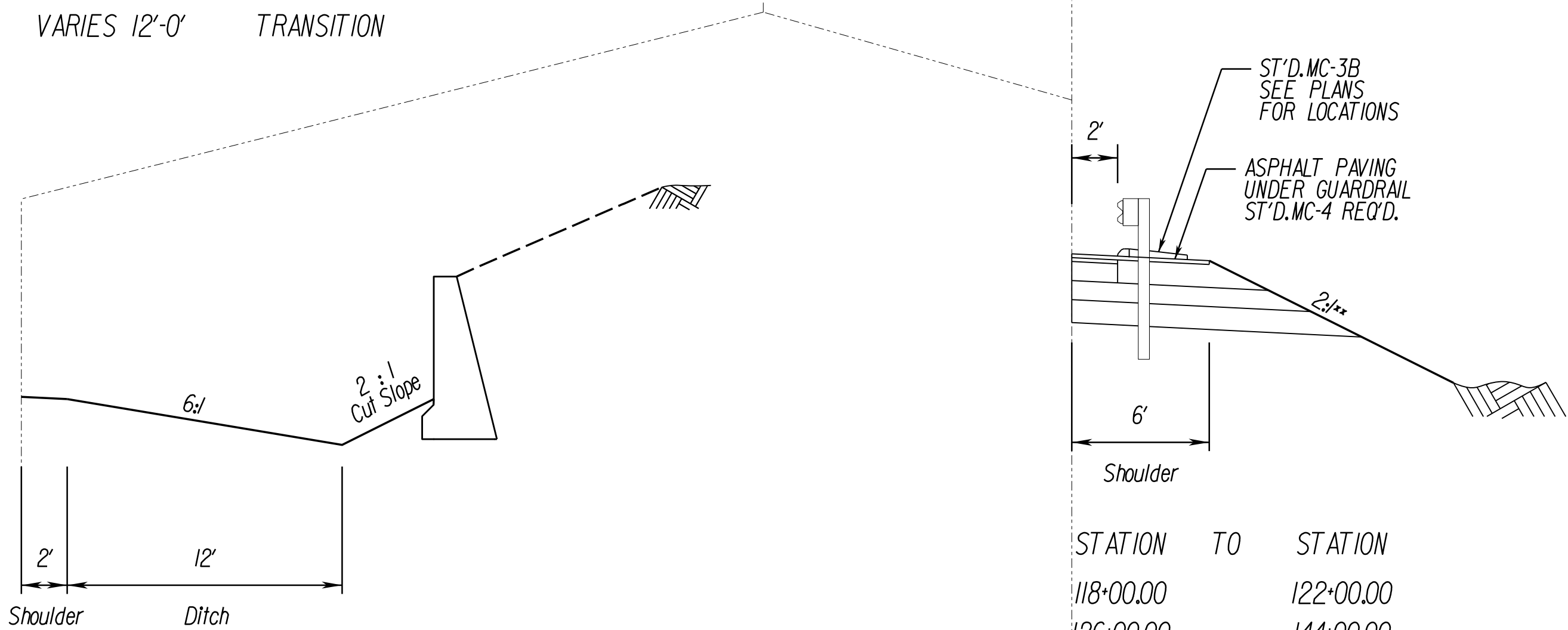
## PH PLANS

THESE PLANS ARE UNFINISHED  
AND UNAPPROVED AND ARE NOT  
TO BE USED FOR ANY TYPE  
OF CONSTRUCTION OR THE  
ACQUISITION OF RIGHT OF WAY.

| REVISED  | STATE | ROUTE   | STATE PROJECT                 | SHEET NO. |
|--|-------|---|-------------------------------|-----------|
|  | VA.   | 81  | 0081-095-829, RW-201<br>C-501 | 2A(1)     |
| DESIGN FEATURES RELATING TO CONSTRUCTION<br>OR TO REGULATION AND CONTROL OF TRAFFIC<br>MAY BE SUBJECT TO CHANGE AS DEEMED<br>NECESSARY BY THE DEPARTMENT |       |   |                               |           |
| VDOT Materials<br>Bristol, Virginia<br>MATERIALS ENGINEER  |       | VDOT Location & Design<br>Bristol, Virginia<br>ROADWAY ENGINEER |                               |           |



| STATION   | TO | STATION   | W             | REMARKS             |
|-----------|----|-----------|---------------|---------------------|
| 118+00.00 |    | 169+00.00 | 12'           | TRUCK CLIMBING LANE |
| 169+00.00 |    | 172+00.00 | VARIES 12'-0' | TRANSITION          |



| STATION   | TO | STATION   |
|-----------|----|-----------|
| 150+50.00 |    | 166+50.00 |

| STATION   | TO | STATION   |
|-----------|----|-----------|
| 118+00.00 |    | 122+00.00 |
| 126+00.00 |    | 144+00.00 |
| 166+50.00 |    | 172+00.00 |

| STATION   | TO | STATION   |
|-----------|----|-----------|
| 122+00.00 |    | 126+00.00 |

NOTE:  
VDOT MOD.WP-2 SHALL BE USED  
WHERE NEW FULL DEPTH PAVEMENT  
WIDENING MEETS EXISTING PAVEMENT.

\*\* SLOPE RESTRICTIONS  
1 1/2:1 FILL SLOPE

| STATION   | TO | STATION   |
|-----------|----|-----------|
| 133+00.00 |    | 143+50.00 |

SEE CROSS SECTIONS  
FOR ADDITIONAL INFORMATION.

## LEGEND

- ① ASPHALT CONCRETE SURFACE COURSE, TYPE SM-12.5E @ 220 LBS.PER SQ. YD.
- ② ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE IM-19.0E @ 230 LBS.PER SQ. YD.
- ③ 10" ASPHALT CONCRETE BASE COURSE, TYPE BM-25.0A
- ④ \*\* 10" AGGREGATE BASE MATERIAL, TYPE I, NO. 21B
- ⑤ 12" AGGREGATE MATERIAL NO. 1

\*\* 2" OF THE 10" IS FOR LEVELING COURSE OVER  
AGGREGATE MATERIAL NO. 1

| PROJECT      | SHEET NO. |
|--------------|-----------|
| 0081-095-829 | 2A(1)     |

PROJECT MANAGER *James Jones, L.S. (276) 696-3257 (Bristol)*  
SURVEYED BY, DATE *Woodperct Inc., (757) 549-3549 (Nov. 24, 2019)*  
DESIGN BY *Rebekah Stroupe, P.E. (276) 696-3369 (Bristol)*  
SUBSURFACE UTILITY BY, DATE *Woodperct Inc., (757) 549-3549 (Nov. 24, 2019)*

STORMWATER POLLUTION PREVENTION PLAN (SWPPP) GENERAL INFORMATION SHEET

The information contained in the SWPPP General Information sheets is intended to comply with the requirements of the VPDES General Permit For Discharges Of Stormwater From Construction Activities (the VPDES Construction Permit) issued July 1, 2019 and VDOT's approved Annual ESC and SWM Standards and Specifications.

The SWPPP General Information sheets are to be completed and included in the construction plan set (or other such documents) for land disturbance activities that disturb an area equal to or greater than 10,000 square feet outside the Chesapeake Bay Preservation Area, or equal to or greater than 2,500 square feet in the area defined as Tidewater, Virginia in the Virginia Chesapeake Bay Preservation Act.

The VDOT RLD (as defined in the latest IIM 242) will ensure that the information shown on the SWPPP General Information sheets is updated/revised as necessary in order to reflect changes that may occur during the construction phase of the land disturbing (construction) activity. The updated/revised sheets shall be maintained with the designated record set of plans (or other such documents) for the land disturbance (construction) activity.

I certify under penalty of law that I have read and understand this document and that this document and all attachments were prepared in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

I further certify that this document and all other documents related to the SWPPP, as identified on the SWPPP General Information Sheets, are maintained at the activity site, or at a location convenient to the activity site where no on-site facilities are available, and such documents will be made available for review upon request in accordance with the provisions of the General VPDES Permit for Discharges of Stormwater from Construction Activities (VAR10) when applicable. Where the SWPPP documents are not stored on-site, a copy of such documents shall be in the possession of those with day to day operational control over the implementation of the SWPPP whenever they are on site.

\* or \*\* Delegated Authority Signature"

Signature: \_\_\_\_\_  
Printed Name: Brian Plummer, P.E.  
Date: \_\_\_\_\_

(1) See Section 1, Item 11 relating to delegation of authority, and form LD-445H (Delegation of Authority).

ACRONYMS

|  |   |
|--|---|
| CBPA - Chesapeake Bay Preservation Act           | SWPPP - Stormwater Pollution Prevention Plan            |
| BMP - Best Management Practice                   | TMDL - Total Maximum Daily Load                         |
| DEQ - Department of Environmental Quality        | VDOT - Virginia Department of Transportation            |
| EPA - U.S. Environmental Protection Agency       | VPDES - Virginia Pollutant Discharge Elimination System |
| ESC - Erosion and Sediment Control               | VSMP - Virginia Stormwater Management Program           |
| IIM - Instructional and Informational Memorandum | VESCP - Virginia Erosion and Sediment Control Program   |
| R&B - Road and Bridge                            | WLA - Waste Load Allocation                             |
| RLD - Responsible Land Disturber                 | SWM - Stormwater Management                             |

SECTION I GENERAL INFORMATION

1. Activity Description - Grading, Paving, and Drainage for an additional Truck Climbing Lane.

2. This land disturbance (construction) activity site is located in Washington County and approximately 9.97 acres will be disturbed by excavation, grading or other construction activities.

3. Coverage

A. This proposed activity disturbs one acre or greater and requires coverage under the VPDES General Permit for Discharges Of Stormwater from Construction Activities (the VPDES Construction Permit) as issued by the DEQ. A copy of the VPDES Construction Permit (VAR10), the registration information (LD-445 & LD-445C forms) and the permit coverage letter received from DEQ shall be maintained with other SWPPP documents for this land disturbing activity.

✖✖ 4. The location of on-site support facilities that will be covered under the VPDES Construction Permit coverage for this land disturbance (construction) activity shall be provided by the contractor and identified on the record set of plans or in other appropriate contract documents. Support facilities shall include, but not be limited to, borrow and disposal areas, construction and waste material storage areas, equipment and vehicle washing, maintenance, storage and fueling areas, storage areas for fertilizers, fuels or chemicals, concrete wash out areas, sanitary waste facilities and any other areas that may generate a stormwater or non-stormwater discharge directly related to the construction site.

✖✖ 5. Written Evidence of permit coverage shall be provided by the contractor for all support activities located outside of VDOT right of way or easement in the form of the Construction General Permit coverage letter: (List VPDES Permit # or Letter from VSMP Authority stating coverage not needed)

6. List the surface waters that have been identified as impaired in the DEQ 2012 305(b)/303(d) Water Quality Assessment Integrated Report for sediment, total suspended solids, turbidity, Nitrogen or Phosphorus. These pollutants are considered benthic impairments: (List the impaired surface waters, when applicable)

7. Identify the TMDL's where stormwater from construction activities discharges into a watershed with a TMDL waste load allocation established and approved by the State Water Control Board prior to July 1, 2016 for sediment, total suspended solids, turbidity, nitrogen or phosphorus: (List the TMDL and pollutant(s) of concern, when applicable)

8. This land disturbance activity discharges stormwater to the following surface waters that have been identified as exceptional in Section 9VAC25-260-30 A 3 c of the Virginia Administrative Code: (List name of surface waters) or not applicable (N/A).

9. Locations of surface waters and locations where concentrated stormwater is discharged from this land disturbance (construction) activity are identified in the construction plan set (or other such documents) for this land disturbance (construction) activity. (List name of surface waters and locations here if not shown in construction plan or other such documents).

10. The ESC and SWM plans (where applicable) for this land disturbance (construction) activity have been developed in accordance with VDOT's Approved Annual Erosion and Sediment Control and Stormwater Management Standards and Specifications as approved by the DEQ.

11. List the RLD and other responsible parties for the land disturbance activity: (required for erosion and sediment control). The following individual(s) have "delegated authority" to sign all reports required by the construction permit including the SWPPP General Information Sheets and Inspection Reports (C-107). Reference form LD-445H for delegation of authority (form 445H for the project is hereby incorporated by reference into this SWPPP). These individual(s) has/have overall responsibility or the environmental matters for the project: (required only for permitted projects):

| Name                | Position            | Responsibility                       |
|---------------------|---------------------|--------------------------------------|
| Brian Plummer, P.E. | RLD                 | Certify the SWPPP (with date & sig.) |
|                     | Certified Inspector | Sign (C-107) Inspection Form Part 1  |
|                     | Certified Inspector | Sign (C-107) Inspection Form Part 2  |
|                     |                     |                                      |
|                     |                     |                                      |
|                     |                     |                                      |

✖✖ 12. The name of the VDOT individual(s) responsible for the oversight inspection in accordance with IIM-LD-256 on these land disturbance construction activities as identified on these SWPPP General Information Sheets. The names will be updated and maintained with the other SWPPP documents for this land disturbance activity.

| VDOT Individuals         | Position            | Responsibility   |
|--------------------------|---------------------|--|
| Derrick Dotson           | NPDES               | NPDES coordinator responsible for the oversight inspection in accordance with IIM-LD-256   |
| Richard Buckingham, P.E. | Dist. Hyd. Engineer | District Hydraulic Engineer or designee(s) responsible for the review & the coordination approval of ESC SWM plan modification(s). |
|                          |                     |  |
|                          |                     |  |
|                          |                     |  |

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Plotted By: elliey  
By Resolution of Highway Commission dated October 4, 1956

| LIMITED ACCESS HIGHWAY |       |       |                                     |           |
|------------------------|-------|-------|-------------------------------------|-----------|
| REVISED                | STATE | ROUTE | STATE PROJECT                       | SHEET NO. |
|                        | VA.   | 81    | 0081-095-829, PE-101, RW-201, C-501 |           |

DESIGN FEATURES RELATING TO CONSTRUCTION OR TO REGULATION AND CONTROL OF TRAFFIC MAY BE SUBJECT TO CHANGE AS DEEMED NECESSARY BY THE DEPARTMENT

✖ 13. The ESC and P2 inspections for this land disturbing (construction) activity shall follow (Select Schedule 1 or 2, if schedule #2 is used, void note #14) as defined in 2016 R&B Specifications except for Section 107.16(e) 4. an Inspection Requirements Rain gauge notes apply only to Inspection Schedule 1.

✖✖ 14. The location of the on-site rain gage that will be used to determine the occurrence of a measurable storm event for the purposes of ESC and Pollution Prevention inspections will be provided by the contractor and identified on the record set of plans or in other appropriate SWPPP documents for this land disturbance activity: (List location of rain gage).

The rain gage shall be observed daily at "\_\_\_\_\_" to determine the occurrence of a measurable storm event (i.e., 0.25 inches of rainfall or greater in a 24 hour period). A log book shall be maintained to record observation information which shall include (1) the date, (2) the time, (3) whether or not rainfall is occurring at the time of the observation, (4) the amount of accumulated rainfall in the gage, if any, and (5) whether or not an inspection is required based on the amount of accumulated rainfall in the gage.

If there is no rainfall occurring at the time of the observation, the observation information shall be noted in the log book and the rain gage emptied and replaced. An inspection is required if there is 0.25 inches or more accumulation noted in the rain gage. If there is rainfall occurring at the time of the observation, the observation information is to be noted in the log book. The rain gage is not to be emptied but left to accumulate additional rainfall until the conclusion of the rainfall event. At the conclusion of the rainfall event, an observation of the rain gage shall be made and the observation information shall be noted in the log book and the rain gage emptied and replaced. An inspection is required if there is 0.25 inches or more accumulation noted in the rain gage.

15. The following VDOT documents are applicable to a) permitted projects b) non-permitted projects in Chesapeake Bay Preservation Areas (CBPA) with 2,500 S.F. to 1.0 acre of land disturbance c) non-permitted projects requiring a SWPPP and d) Non-permitted, Non-CBPA with BMP projects that have a water quantity BMP:

VDOT LD-445: Permitted projects, CBPA projects and Non-permitted, Non-CBPA with BMP projects that have a water quantity BMP and ESC projects > 10,000 s.f. but <1 acre.

VDOT LD-445A: Permitted projects only.

VDOT LD-445C: Projects that require a permit, ESC Plan, or SWPPP.

VDOT LD-445D: Permitted projects, CBPA projects and Non-permitted, Non-CBPA with BMP projects that have a water quantity BMP.

VDOT LD-445F: Emergency work projects (when applicable).

Water Quality Requirement (when applicable)

VDOT LD-445H: Permitted projects only.

VDOT C-107 Part I and Part II. All projects that require a permit or SWPPP.

VDOT LD-445I: AS&S Approval Form (when applicable)

16. If there is an excessive loading of sediment from the project (i.e. more than to be expected from the project with an implemented ESC plan) that is discovered within a local watershed with a sediment TMDL that allocates a WLA to VDOT's MS4, (see note #7) the contractor shall investigate the area of concern at the site within 24 hours of discovery and ensure all erosion and sediment control best management practices are being implemented in accordance with the permits approved standards and specifications required by Part I.B of the current Construction General Permit. If corrective action is necessary, the contractor shall initiate corrective actions no later than 5 business days after the initial investigation.

17. If excessive loading of sediment from a land disturbing activity that is not the responsibility of the contractor is discovered discharging into a MS-4, the contractor shall notify the municipality with jurisdiction over erosion and sediment control activities.

✖ Denotes information that is to be provided/completed by the RLD.

✖✖ Denotes information that is to be provided/completed by the contractor.

Revised 5/1/19

| PROJECT      | SHEET NO. |
|--------------|-----------|
| 0081-095-829 | 2B(1)     |



PROJECT MANAGER *James Jones, L.S. (276) 696-3257 (Bristol)*  
SURVEYED BY, DATE *Woodport Loc. (757) 549-3549 (Nov. 24, 2019)*  
DESIGN BY *Rebekah Stroupe, P.E. (276) 696-3369 (Bristol)*  
SUBSURFACE UTILITY BY, DATE *Woodport Loc. (757) 549-3549 (Nov. 24, 2019)*

| REVISED | STATE | ROUTE | STATE<br>PROJECT                       | SHEET NO. |
|---------|-------|-------|--|-----------|
|         | VA.   | 81    | 0081-095-829, PE-101,<br>RW-201, C-501 |           |

DESIGN FEATURES RELATING TO CONSTRUCTION  
OR TO REGULATION AND CONTROL OF TRAFFIC  
MAY BE SUBJECT TO CHANGE AS DEEMED  
NECESSARY BY THE DEPARTMENT

SECTION II EROSION AND SEDIMENT CONTROL

- XX 1. The intended sequence and timing of activities that disturb soils at the site (e.g., grubbing, excavation, grading, utilities and infrastructure installation, etc.) shall be provided by the contractor in accordance with the current edition of Section 108.03 of the VDOT R&B Specifications and shall be included with the other SWPPP documents for this land disturbance (construction) activity.
2. Directions of stormwater flow and approximate slopes anticipated after major grading activities are identified in the construction plan set (or other such documents) for this land disturbance (construction) activity.
3. Areas of soil disturbance and areas of the site which will not be disturbed are identified in the construction plan set (or other such documents) for this land disturbance (construction) activity.
4. Locations of major structural and nonstructural ESC measures intended to filter, settle or similarly remove sediment are identified in the construction plan set (or other such documents) for this land disturbance (construction) activity.
5. Locations where stabilization practices are expected to occur are identified in the construction plan set (or other such documents) for this land disturbance (construction) activity.
6. A description of interim and permanent stabilization practices for the site are identified in the applicable sections of the documents identified in the Note 1 of Section IV.
- XX 7. A record of the dates when major grading activities occur, when construction activities temporarily or permanently cease on a portion of the site, and when stabilization measures are initiated will be provided by the contractor and maintained with the record set of plans or other SWPPP documents for this land disturbance (construction) activity: (List how this will be tracked and the location)
8. A description and schedule of procedures to maintain vegetation, erosion and sediment control measures and other protective measures in good and effective operating conditions are identified in the current edition of Sections 107.16 and 303.03 of the VDOT R&B Specifications.
9. Nutrients shall be applied in accordance with the current edition of Sections 603 and 604 of the VDOT Road and Bridge Specifications. Nutrients shall not be applied during rainfall events. Top soil shall be applied in accordance with the current edition of section 602 of the latest Road and Bridge Specifications.
10. All engineering calculations supporting the design of erosion and sediment control measures proposed for this land disturbance (construction) activity are contained in the project drainage file located in the Bristol District Hydraulics Section and will be made available for review upon request during normal business hours.
11. The temporary erosion and siltation control items shown on the ESC Plan for this land disturbing (construction) activity are intended to provide a general plan for controlling erosion and sediment within the project limits. The ESC Plan is based on field conditions at the time of plan development and an assumed sequence of construction for the project. The contractor, in conjunction with the VDOT Project Engineer and/or ESC Inspector, shall adjust the location, quantity and type of erosion and sediment control items required based on the actual field conditions encountered at the time of construction and the actual scheduling and sequencing of the construction activities. Significant changes to the proposed ESC Plan (e.g., those that require an engineering analysis, elimination of a perimeter control, change to ESC concept that would affect the quantity or direction of flow of water) shall be submitted to the applicable District Hydraulics Engineer for review and approval. Any changes to the proposed ESC Plan must be noted on the designated record set of plans which shall be retained on the project site and made available upon request during normal business hours.
12. The areas beyond the project's construction limits are to be protected from siltation. Perimeter controls such as silt fence, diversion dikes, turbidity curtains, etc. shall be installed prior to any grubbing operations or other earth moving activities.
13. Temporary earthen structures such as dikes and berms are to be stabilized immediately upon installation. Stabilization may include temporary or permanent seeding, riprap, aggregate, sod, mulching, and/or soil stabilization blankets and matting in conjunction with seeding.
14. All channel relocations are to be constructed during the earliest stage of construction and shall be constructed in accordance with all applicable permit requirements and shall be constructed in the dry wherever possible. Stabilization or vegetation shall be established before flow is redirected through the constructed area as directed by the Engineer.
15. The contractor shall plan and implement his land disturbance operations in order to:
- Control the volume and velocity of stormwater runoff within the site to minimize erosion.
  - Control the peak flow rates, volume and velocity of stormwater discharges to minimize erosion at outlets and in downstream channels.
  - Minimize the amount of soil exposed.
  - Minimize the disturbance of steep slopes.
  - Minimize sediment discharge from the site.
  - Provide and maintain natural buffers around surface waters, direct stormwater runoff to vegetated areas and maximize stormwater infiltration, unless infeasible.
  - Minimize soil compaction (except in those areas where compaction is required by the contract documents) and preserve topsoil where feasible.

- XX 16. The name of the individual(s) or contractor(s) responsible for the installation and maintenance of the erosion and sediment control measures shall be supplied by the contractor and maintained with the other SWPPP documents for this land disturbance (construction) activity.
17. Soil stockpiles temporarily placed within the project area or on VDOT right of way or easement shall be identified, stabilized, and protected with sediment trapping measures.

18. A construction entrance or other approved measure shall be installed at all locations where construction vehicular traffic access routes intersect a paved or a public road in order to minimize the transport of sediment by vehicular tracking onto the paved surface. Where sediment is transported onto a paved or a public road surface, the road shall be cleaned thoroughly at the end of each work day by shoveling or sweeping. Removed sediment shall be disposed of in accordance with Section 106.04 of the R&B Specifications.

19. Any variance, exception or deviation approved by DEQ must be listed below and supporting documentation (exception/variance/deviation request and DEQ approval) must be maintained with the SWPPP.

The following exceptions to the Water Quantity criteria of the VSMP Regulation have been approved by the DEQ for this land disturbance (construction) activity: (list all approved exceptions and include a brief description of the exception, the date approved and the approving DEQ Office)

| Type(1) | Regulation Modified(2) | Approval Date(3) | Description of Variance |
|---------|------------------------|------------------|-------------------------|
|         |                        |                  |                         |
|         |                        |                  |                         |

- (1) Type of modification (Variance from ESC regulations, or Deviation from published guidance)  
(2) Section of Regulation or Guidance Document Modified (e.g. ESC Min. Std. 15)  
(3) Date that variance/exception/deviation was approved by DEQ.

SECTION III POST CONSTRUCTION STORMWATER MANAGEMENT

Choose the appropriate note 1A or 1B that is applicable to the proposed post construction SWM Plan for this land disturbance (construction) activity. (Delete, strikethrough or mark as NA those notes not applicable.)

1. (Include one of the following notes as appropriate)

~~✖ A. This land disturbance activity is grandfathered under Section 9VAC25-870-48 of the VSMP Regulations and utilizes the Part IIC technical criteria (i.e., Performance or Technology Based, MS-19, etc.) in Section 9VAC25-870-93 et seq. of the VSMP Regulations.~~

✖ B. This land disturbance activity utilizes the Part IIB technical criteria (i.e., Runoff Reduction Method, Energy Balance Equation, etc.) in Section 9VAC25-870-62 et seq. of the VSMP Regulations.

~~2. An exception for (number) pounds of phosphorus removal has been granted for this land disturbance activity by the DEQ in its letter dated (date).~~

3. Any variance, exception or deviation approved by DEQ must be listed below and supporting documentation (exception/variance/deviation request and DEQ approval) must be maintained with the SWPPP.

The following exceptions to the Water Quantity criteria of the VSMP Regulation have been approved by the DEQ for this land disturbance activity: (list all approved exceptions and include a brief description of the exception, the date approved and the approving DEQ Office)

| Type(1) | Regulation Modified(2) | Approval Date(3) | Description of Waiver |
|---------|------------------------|------------------|-----------------------|
|         |                        |                  |                       |
|         |                        |                  |                       |

- (1) Type of modification (Variance, or Exception from SWM Regulations or Deviation from published guidance)  
(2) Section of Regulation or Guidance Document Modified (e.g. ESC Min. Std. 15)  
(3) Date that variance/exception/deviation was approved by DEQ.

4. The permanent onsite SWM facilities or offsite strategies proposed to meet the water quality/quantity requirements for this land disturbance (construction) activity are listed in Section VI.

ACRONYMS

CBPA - Chesapeake Bay Preservation Act  
BMP - Best Management Practice  
DEQ - Department of Environmental Quality  
EPA - U.S. Environmental Protection Agency  
ESC - Erosion and Sediment Control  
IIM - Instructional and Informational Memorandum  
R&B - Road and Bridge  
RLD - Responsible Land Disturber

SWPPP - Stormwater Pollution Prevention Plan  
TMDL - Total Maximum Daily Load  
VDOT - Virginia Department of Transportation  
VPDES - Virginia Pollutant Discharge Elimination System  
VSMP - Virginia Stormwater Management Program  
VESCP - Virginia Erosion and Sediment Control Program  
WLA - Waste Load Allocation  
SWM - Stormwater Management

✖ Denotes information that is to be provided/ completed by the RLD.

XX Denotes information that is to be provided/completed by the contractor.

Revised 5/1/19

| PROJECT      | SHEET NO. |
|--------------|-----------|
| 0081-095-829 | 2B(2)     |

PROJECT MANAGER *James Jones, L.S. (276) 696-3257 (Bristol)*  
SURVEYED BY, DATE *Woodpeck Inc., (757) 549-3549 (Nov. 24, 2019)*  
DESIGN BY *Rebekah Stroupe, P.E. (276) 696-3369 (Bristol)*  
SUBSURFACE UTILITY BY, DATE *Woodpeck Inc., (757) 549-3549 (Nov. 24, 2019)*

STORMWATER POLLUTION PREVENTION PLAN (SWPPP) GENERAL INFORMATION SHEET

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Plotted By: elliley  
By Resolution of Highway Commission  
dated October 4, 1956

LIMITED ACCESS HIGHWAY

| REVISED | STATE | ROUTE | STATE PROJECT                       | SHEET NO. |
|---------|-------|-------|-------------------------------------|-----------|
|         | VA.   | 81    | 0081-095-829, PE-101, RW-201, C-501 | 2B(3)     |

DESIGN FEATURES RELATING TO CONSTRUCTION OR TO REGULATION AND CONTROL OF TRAFFIC MAY BE SUBJECT TO CHANGE AS DEEMED NECESSARY BY THE DEPARTMENT

The information contained in the SWPPP General Information sheets is intended to comply with the requirements of the VPDES General Permit For Discharges Of Stormwater From Construction Activities (the VPDES Construction Permit) issued July 1, 2019 and VDOT's approved Annual ESC and SWM Standards and Specifications.

The SWPPP General Information sheets are to be completed and included in the construction plan set (or other such documents) for land disturbance (construction) activities that disturb an area equal to or greater than 10,000 square feet outside the Chesapeake Bay Preservation Area, or equal to or greater than 2,500 square feet in the area defined as Tidewater, Virginia in the Virginia Chesapeake Bay Preservation Act.

The VDOT RLD will ensure that the information shown on the SWPPP General Information sheets is updated/revised as necessary in order to reflect changes that may occur during the construction phase of the land disturbing (construction) activity. The updated/revised sheets shall be maintained with the designated record set of plans (or other such documents) for the land disturbance (construction) activity.

SECTION IV SWPPP

1. All documents related to the SWPPP for this land disturbance (construction) activity shall be maintained at the activity site and shall be readily available for review upon request during normal business hours. Such documents include, but are not limited to, the construction plans (or other such documents), the ESC Plan, the Pollution Prevention Plan, the post construction SWM Plan (if applicable), the VDOT R&B Standards and Specifications, Supplemental Specifications, Special Provisions and Special Provision Copied Notes. Documents related to stormwater pollution prevention which are not a part of those documents referenced above, such as copies of the VPDES Construction Permit coverage letter (when applicable) and the VPDES General Permit For Discharges Of Stormwater From Construction Activities (when applicable) and those required to be developed by the contractor for pollution prevention associated with any on-site support facilities being included in the VPDES Construction Permit coverage for this land disturbance (construction) activity are to be maintained at the activity site with the other SWPPP documents for this land disturbance (construction) activity. Where no facilities are available at the activity site to maintain the SWPPP documents, they are to be kept by or with the designated RLD at a location convenient to the activity site where they would be made available for review upon request during normal business hours.

2. The SWPPP and any subsequent amendments, modifications and updates shall be implemented from commencement of land disturbance until termination of VPDES Construction Permit coverage or completion of land disturbance (construction) activities where no VPDES Construction Permit coverage is required.

✖✖ 3. For all on-site support facilities that will be included in the VPDES Construction Permit coverage for this land disturbance (construction) activity, the contractor shall develop a SWPPP in accordance with, but not limited to, Section 106.08, 107.02 and 107.16 of the VDOT Road and Bridge Specifications. The SWPPP for the on-site support facilities shall be maintained with and become a component of the SWPPP for this land disturbance (construction) activity. Support facilities shall include, but not be limited to, borrow and disposal areas, construction and waste material storage areas, equipment and vehicle washing, maintenance, storage and fueling areas, storage areas for fertilizers, fuels or chemicals, concrete wash out areas, sanitary waste facilities and any other areas that may generate a stormwater or non-stormwater discharge directly related to the construction site.

4. For those land disturbing (construction) activities requiring coverage under the VPDES Construction Permit, the SWPPP shall be made available for review upon the request of the DEQ, the EPA, the VSMP Authority, the VESCP Authority, local government officials or the operator of a municipal separate storm sewer system (MS4) receiving discharge from the construction site.

✖ 5. For those land disturbing (construction) activities requiring coverage under the VPDES Construction Permit, the VDOT RLD shall post, or have posted, a copy of the General Permit coverage letter and a copy of a completed LD-445A form, noting the name and contact information for the VDOT person responsible for the land disturbing (construction) activity and its SWPPP, outside the project's construction office along with other Federal and State mandated information. Where there is no construction office (e.g., a maintenance activity), the permit coverage letter and the LD-445A form are to be maintained with the other SWPPP documents for the land disturbing (construction) activity.

6. The SWPPP shall be made available for review by the public upon request. Such reviews shall be at a time and publicly accessible location convenient to the VDOT and shall be scheduled during normal business hours and no less than once per month.

SECTION V - POLLUTION PREVENTION PLAN

- The following non-stormwater discharges from this land disturbing (construction) activity and any on-site support facilities are prohibited:
  - Wastewater from concrete washouts.
  - Wastewater from the washout and cleanout of stucco, paint, from release oils, curing compounds and other construction materials.
  - Fuels, oils or other pollutants used in vehicle and equipment operation and maintenance.
  - Oils, toxic substances or hazardous substances from spills or other releases.
  - Soaps, solvents or detergents used in equipment and vehicle washing.
  - There shall be no discharge of floating solids or visible foam in other than trace amounts
- The following non-stormwater discharges from this land disturbing (construction) activity and any on-site support facilities are allowed when discharged in compliance with the VPDES Construction Permit:
  - Discharges from firefighting activities.
  - Fire hydrant flushings.
  - Waters used to wash vehicles or equipment where soaps, solvents or detergents have not been used and the wash water has been filtered, settled or similarly treated prior to discharge.
  - Water used to control dust that has been filtered, settled or similarly treated prior to discharge.
  - Potable water sources including uncontaminated waterline flushings managed in a manner to avoid stream impacts.
  - Routine external building wash down where soaps, solvents or detergents have not been used and the wash water has been filtered, settled or similarly treated prior to discharge.
  - Pavement wash waters where spills or leaks of toxic or hazardous materials have not occurred (or where all spilled or leaked material has been removed prior to washing), where soaps, solvents or detergents have not been used and where the wash water has been filtered, settled or similarly treated prior to discharge.
  - Uncontaminated air conditioning or compressor condensate.
    - Uncontaminated ground water or spring water.
  - Foundation or footing drains where flows are not contaminated with process materials such as solvents.
  - Uncontaminated excavation dewatering, including dewatering trenches and excavations that have been filtered, settled or similarly treated prior to discharge.
  - Landscape irrigation.

✖✖

- The contractor shall develop a Pollution Prevention Plan to address any of his on-site operations that have a potential to generate a pollutant that may reasonably be expected to affect the quality of stormwater discharges from this land disturbance (construction) activity. The Pollution Prevention Plan shall be developed in accordance with, but not limited to, Sections 106.08, 107.02 and 107.16 of the VDOT Road and Bridge Specifications and shall include a narrative with appropriate plan detail and shall be provided on standard 8.5 x 11 inch paper or larger and shall:
  - Identify the potential pollutant-generating activities and the pollutant that is expected to be exposed to stormwater.
  - Describe the location where the potential pollutant-generating activities will occur, or if identified on the record set of plans, reference the record set of plans.
  - Identify all non-stormwater discharges, as described in note two of this section, that are or will be commingled with stormwater discharges from the construction activity, including any on-site support activities.
  - Identify the person(s) or contractor(s) responsible for implementing and maintaining the pollution prevention practice or practices for each pollutant-generating activity.
  - Describe the pollution prevention practices and procedures that will be implemented to:
    - Prevent and respond to leaks, spills, and other releases, including procedures for expeditiously stopping, containing, and cleaning up spills, leaks, and other releases, and procedures for reporting leaks, spills, and other releases in accordance with Section 107.16 of the VDOT Road and Bridge Specifications and the requirements within the VPDES Construction Permit.

- Prevent the discharge of spilled and leaked fuels and chemicals from vehicle fueling and maintenance activities.
- Prevent the discharge of soaps, solvents, detergents, and wash water from construction materials, including procedures for the clean-up of stucco, paint, form release oils, and curing compounds.
- Minimize the discharge of pollutants from vehicle and equipment washing, wheel wash water, and other types of washing.
- Direct concrete wash water into a leak-proof container or leak-proof settling basin. The container or basin shall be designed so that no overflows can occur due to inadequate sizing or precipitation. Hardened concrete wastes shall be removed and disposed of in a manner consistent with the handling of other construction wastes. Liquid concrete wastes shall be removed and disposed of in a manner consistent with the handling of other construction wash waters and shall not be discharged to surface waters.
- Minimize the discharge of pollutants from storage, handling, and disposal of construction products, materials, and wastes including building products (such as asphalt sealants, copper flashing, roofing materials, adhesives, and concrete admixtures), pesticides, herbicides, insecticides, fertilizers, landscape materials, construction and domestic wastes (such as packaging materials), scrap construction materials, masonry products, timber, pipe and electrical cuttings, plastics, styrofoam, concrete, and other trash or building materials.
- Prevent the discharge of fuels, oils, and other petroleum products, hazardous or toxic wastes, waste concrete and sanitary wastes.
- Address any other discharge from any potential pollutant-generating activity not listed herein.
- Minimize the exposure of waste materials to precipitation by closing or covering waste containers during precipitation events and at the end of the business day, or implementing other similarly effective practices. Minimization of exposure is not required in case where the exposure to precipitation will not result in a discharge of pollutants.
- Describe and implement procedures for providing pollution prevention awareness (including but not limited to prevention practices, disposal practices and appropriate disposal locations) for all applicable wastes (including any wash water), to appropriate personnel.

✖ Denotes information that is to be provided/completed by the RLD.

✖✖ Denotes information that is to be provided/completed by the contractor.

Revised 5/1/19

|  |                         |                    |
|--|-------------------------|--------------------|
|  | PROJECT<br>0081-095-829 | SHEET NO.<br>2B(3) |
|--|-------------------------|--------------------|



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Plotted By: elliley  
By Resolution of Highway Commission dated October 4, 1956

LIMITED ACCESS HIGHWAY

| REVISED | STATE | ROUTE | STATE<br>PROJECT                       | SHEET NO. |
|---------|-------|-------|--|-----------|
|         | VA.   | 81    | 0081-095-829, PE-101,<br>RW-201, C-501 | 2B(4)     |

DESIGN FEATURES RELATING TO CONSTRUCTION OR TO REGULATION AND CONTROL OF TRAFFIC MAY BE SUBJECT TO CHANGE AS DEEMED NECESSARY BY THE DEPARTMENT

PROJECT MANAGER *James Jones, L.S. (276) 696-3257 (Bristol)*  
SURVEYED BY, DATE *Woodport Loc., (757) 549-3549 (Nov. 24, 2019)*  
DESIGN BY *Rebekah Stroupe, P.E. (276) 696-3369 (Bristol)*  
SUBSURFACE UTILITY BY, DATE *Woodport Loc., (757) 549-3549 (Nov. 24, 2019)*

The information contained in the SWPPP General Information sheets is intended to comply with the requirements of the VPDES General Permit For Discharges Of Stormwater From Construction Activities (the VPDES Construction Permit) issued July 1, 2019 and VDOT's approved Annual ESC and SWM Standards and Specifications.

The SWPPP General Information sheets are to be completed and included in the construction plan set (or other such documents) for land disturbance (construction) activities that disturb an area equal to or greater than 10,000 square feet, or equal to or greater than 2,500 square feet in the area defined as Tidewater, Virginia in the Virginia Chesapeake Bay Preservation Act.

STORMWATER POLLUTION PREVENTION PLAN (SWPPP)  
GENERAL INFORMATION SHEET

The VDOT RLD will ensure that the information shown on the SWPPP General Information sheets is updated/revised as necessary in order to reflect changes that may occur during the construction phase of the land disturbing (construction) activity. The updated/revised sheets shall be maintained with the designated record set of plans (or other such documents) for the land disturbance (construction) activity.

SECTION VI - PERMANENT BMP INFORMATION Δ

✱ Denotes information that is to be completed by the RLD.  
( ) See note referenced by number in parentheses.

INSTALLED BMP INFORMATION  
(VDOT Owned/Operated)

| Plan Sheet(s) | Date BMP Made Functional | Type of BMP Installed<br>(See Table A and C ) | Geographic Location<br>(County or City) | Latitude/Longitude<br>(1) |      | VA 6th Order HUC<br>(7) | Receiving Water<br>(2) | Name of Impaired Water<br>(9) | Acres Treated Per BMP (3) |          |       | ✱ BMP Maintenance ID Number<br>(10) | BMP Maintenance Manual<br>(11) | BMP Inspection Manual<br>(11) |
|---------------|--------------------------|---|---|---------------------------|------|-------------------------|------------------------|-------------------------------|---------------------------|----------|-------|-------------------------------------|--------------------------------|-------------------------------|
|               |                          |   |   | LAT                       | LONG |                         |                        |                               | Impervious                | Pervious | TOTAL |                                     |                                |                               |
|               |                          |   |   |                           |      |                         |                        |                               |                           |          |       |                                     |                                |                               |
|               |                          |   |   |                           |      |                         |                        |                               |                           |          |       |                                     |                                |                               |
|               |                          |   |   |                           |      |                         |                        |                               |                           |          |       |                                     |                                |                               |
|               |                          |   |   |                           |      |                         |                        |                               |                           |          |       |                                     |                                |                               |
|               |                          |   |   |                           |      |                         |                        |                               |                           |          |       |                                     |                                |                               |
|               |                          |   |   |                           |      |                         |                        |                               |                           |          |       |                                     |                                |                               |
|               |                          |   |   |                           |      |                         |                        |                               |                           |          |       |                                     |                                |                               |
|               |                          |   |   |                           |      |                         |                        |                               |                           |          |       |                                     |                                |                               |
|               |                          |   |   |                           |      |                         |                        |                               |                           |          |       |                                     |                                |                               |

ALTERNATIVE BMP INFORMATION

| Plan Sheet(s) | Date | Type of BMP Installed<br>(See Table B) | Geographic Location<br>(County or City)<br>(5) | Latitude/Longitude<br>(1) (5) |      | VA 6th Order HUC<br>(5) (7) | Receiving Water<br>(2) | Name of Impaired Water<br>(9) | Perpetual Nutrient Credits Acquired for Project  |  |
|---------------|------|--|--|-------------------------------|------|-----------------------------|------------------------|-------------------------------|--|--|
|               |      |  |  | LAT                           | LONG |                             |                        |                               | Name of Nutrient Credit Generating Entity<br>(6) | Nutrient Credits (lbs./TP./year)<br>Acquired<br>(6) (12) |
|               |      |  |  |                               |      |                             |                        |                               |  | 4.70 LB/YR   |
|               |      |  |  |                               |      |                             |                        |                               |  |  |
|               |      |  |  |                               |      |                             |                        |                               |  |  |
|               |      |  |  |                               |      |                             |                        |                               |  |  |
|               |      |  |  |                               |      |                             |                        |                               |  |  |
|               |      |  |  |                               |      |                             |                        |                               |  |  |
|               |      |  |  |                               |      |                             |                        |                               |  |  |
|               |      |  |  |                               |      |                             |                        |                               |  |  |
|               |      |  |  |                               |      |                             |                        |                               |  |  |
|               |      |  |  |                               |      |                             |                        |                               |  |  |

Table A: Permanent BMP Types (1999 Va. SWM Handbook)

Bio-retention Basin  
Bio-retention Filter  
Constructed Stormwater Wetlands  
Extended Detention Basin  
Extended Detention Basin Enhanced  
Grassed Swale  
Infiltration Basin  
Infiltration Trench  
Manufactured Treatment Device (MTD) (8)  
Retention Basin I  
Retention Basin II  
Retention Basin III  
Sand Filter  
Vegetated Filter Strip  
Other Approved Types (List Type)  
Detention Basin

Table B: Alternative BMP Types  
Comprehensive SWM Plan (Regional) Facility  
Pollutant Loading Pro Rata Share Program  
Other Approved Options (List Type) (4)

Table C: Permanent BMP Types (BMP Clearing House)

Sheet Flow to Vegetated Filter Strip  
Grass Channel  
Soil Compost Amendment  
Permeable Pavement (Level 1)  
Permeable Pavement (Level 2)  
Infiltration Practice (Level 1)  
Infiltration Practice (Level 2)  
Bioretention (Level 1)  
Bioretention (Level 2)  
Dry Swale (Level 1)  
Dry Swale (Level 2)  
Wet Swale (Level 1)  
Wet Swale (Level 2)  
Filtering Practice (Level 1)  
Filtering Practice (Level 2)  
Constructed Wetlands (Level 1)  
Constructed Wetlands (Level 2)  
Extended Detention Pond (Level 1)  
Extended Detention Pond (Level 2)  
Wet Pond (Level 1)  
Wet Pond (Level 2)  
Manufactured Treatment Device (MTD) (8)  
Other Approved Types (List Type)

- NOTES:
- (1) In decimal degrees to the nearest one ten-thousandth of a degree.
- (2) For streams with no names, list "(Unnamed Tributary to downstream name)".
- (3) Show acres treated to the nearest one hundredths acre.
- (4) Include agreements with off-site BMP owners.
- (5) Information pertains to the alternative BMP option location, where applicable.  
Exception - Not required for nutrient credit purchase option.
- (6) Applies to the purchase of nutrient credits only.
- (7) Virginia 6th Order HUC (VAHU6) Example - YQ30.
- (8) Final approved shop drawings of Manufactured Treatment Devices (MTDs) are to be included with the BMP information submitted with the LD-445D form.
- (9) List the name of any impaired water to which the BMP discharges.  
The determination of impaired water shall be based on those streams listed as impaired in the DEQ 2012 305(b)/303(d) Water Quality Assessment Integrated Report and shall be the first named waterbody to which the BMP discharges. The impaired waters are those impaired by sediment, total suspended solids, turbidity, nitrogen or phosphorus.
- (10) BMP Maintenance ID Number is to be assigned by the District Maintenance Division at permit termination or project completion.  
This ID number shall be assigned prior to the permit close out process and entered by the area construction engineer under this column, per IIM-LD-95

Δ Any changes to the proposed SWM Plan or BMPs necessitated during the construction phase of the project that affects the proposed construction details or potentially affects the information shown in the BMP Tables A and/or B shall be coordinated by the VDOT RLD with the appropriate VDOT District Hydraulics Engineer. The construction plans and the BMP Tables A and/or B are to be formally revised to reflect any authorized/approved changes to the proposed SWM Plan and/or the proposed BMP construction details. All plan revisions shall be completed in accordance with the Road Design Manual and the Construction Division IIM-CD-2013-12.01, signed and sealed in accordance with Department's sealing and signing policy IIM-LD-243 and filed with the construction record drawings maintained in the VDOT Central Office Plan File Room (ProjectWise). Prior to submitting for termination of coverage under the VPDES General Permit For The Discharge Of Stormwater From Construction Activities, the RLD shall have the District Maintenance Division review the BMPs installed with the project (BMP Table A) for acceptance of maintenance responsibility and to obtain a Maintenance ID number for each BMP listed in BMP Table A. The RLD shall use the information in BMP Tables A and B along with the assigned Maintenance ID number and the date that the BMP became functional as a permanent control measure (for BMPs in Table A only) to complete the LD-445D form when certifying the construction of the BMPs and submitting for termination of coverage under the VPDES General Permit For The Discharge Of Stormwater From Construction Activities.

- (11) Provide the section of each Maintenance manual that pertains to the type of BMP. Both manuals can be found at [www.vdot.virginia.gov/business/manuals](http://www.vdot.virginia.gov/business/manuals) in the Maintenance selections.  
Example: Section 4 would be noted for both the maintenance and inspection manuals for a Bioretention Infiltration BMP.
- (12) Nutrient credits purchased to the nearest one hundredth pound.

Revised 5/1/19

| PROJECT      | SHEET NO. |
|--------------|-----------|
| 0081-095-829 | 2B(4)     |

BRISTOL DISTRICT DESIGN UNIT

3/11/2021  
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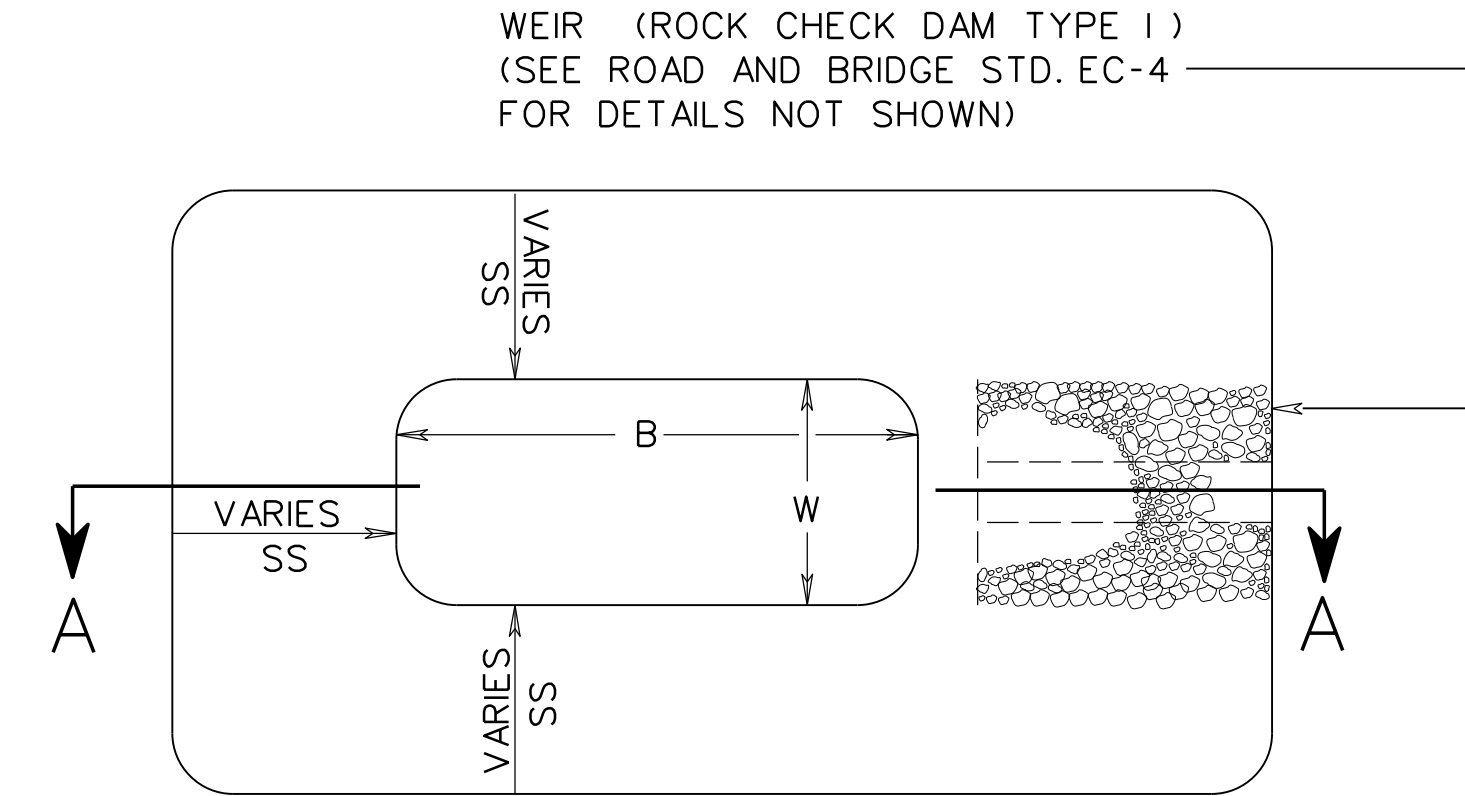
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Plotted By: elliley

PROJECT MANAGER *JAMES JONES,LS,(276) 696-3250*  
SURVEYED BY, DATE *WOOLPERT,INC.(757) 549-3549*  
DESIGN BY *TAMARA BRITCHARD,PE,(276) 696-3249*  
SUBSURFACE UTILITY BY, DATE *WOOLPERT,INC.(757) 549-3549*

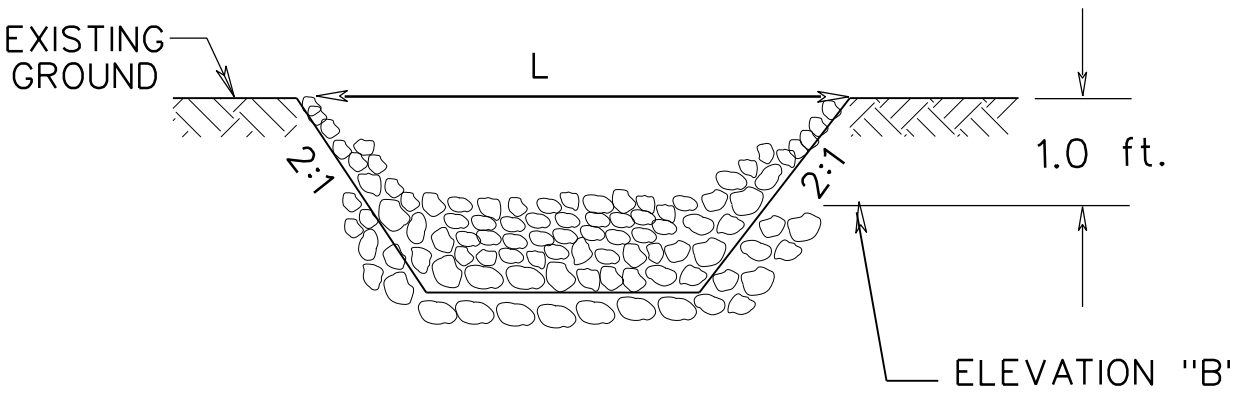
TEMPORARY SEDIMENT TRAP DETAILS

| TEMPORARY SEDIMENT TRAP TABLE        |   |   |                             |                                |                                |       |   |  |                                |  |
|--------------------------------------|---|---|-----------------------------|--------------------------------|--------------------------------|-------|---|--|--------------------------------|--|
|                                      |   |   |                             |                                |                                |       | ESTIMATED QUANTITIES                      |  |                                |  |
|                                      |   |   |                             |                                |                                |       | SEDIMENT BASIN<br>EXCAVATION<br>CU. YARDS | SILTATION CONTROL<br>EXCAVATION<br>CU. YARDS | DRY RIP RAP<br>CLASS I<br>TONS | REMARKS  |
|                                      |   |   |                             |                                |                                |       |   |  |                                |  |
| SEDIMENT TRAP<br>INFORMATION         | SECTION<br>THRU<br>TEMPORARY<br>SEDIMENT TRAP | SECTION<br>THRU<br>WEIR                       | SIDE<br>SLOPES<br>(SS)      | WET<br>STORAGE<br>ELEV.<br>(C) | DRY<br>STORAGE<br>ELEV.<br>(B) |       |   |  |                                |  |
| SHEET NO.<br>STATION NO.<br>TRAP NO. | 4B<br>STA. 120+25<br>1                        | B= 14'<br>W= 44'<br>ELEV. D= 1988'<br>T= 5.0' | L= 4.5'<br>Elev. B = 1991'  | 2:1                            | 1989.5'                        | 1991' | 85  | 28   | 12                             | TO BE INSTALLED IN EROSION AND<br>SEDIMENT CONTROL PHASE 1 / 1A. |
| SHEET NO.<br>STATION NO.<br>TRAP NO. | 5B<br>STA. 133+75<br>2                        | B= 60'<br>W= 15'<br>ELEV. D= 2018'<br>T= 5.0' | L= 10.5'<br>Elev. B = 2021' | 2:1                            | 2019.5'                        | 2021' | 139                                       | 60   | 15                             | TO BE INSTALLED IN EROSION AND<br>SEDIMENT CONTROL PHASE 1 / 1A. |
| SHEET NO.<br>STATION NO.<br>TRAP NO. |   | B=<br>W=<br>ELEV. D=                          | L=<br>Elev. B =             |                                |                                |       |   |  |                                |  |

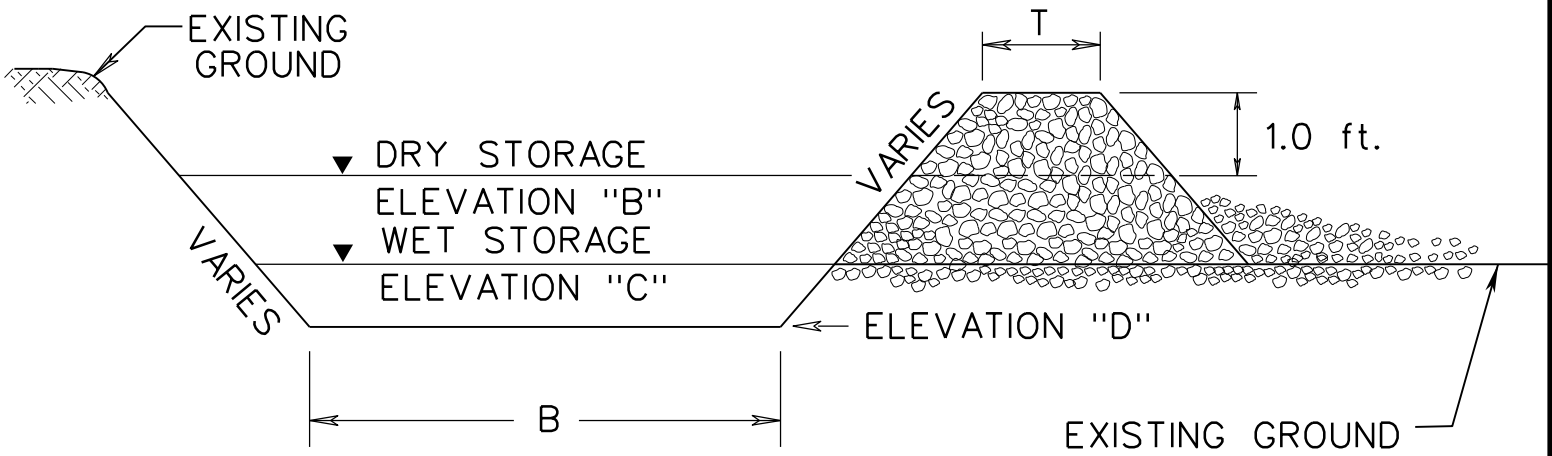
|   |  |       |         |                                      |           |
|---|--|-------|---------|--------------------------------------|-----------|
|   | REVISED  | STATE | STATE   |                                      | SHEET NO. |
|   |  | ROUTE | PROJECT |                                      |           |
|   |  | VA.   | 81      | 0081-095-829,PE-101,<br>RW-201,C-501 |           |
|   | DESIGN FEATURES RELATING TO CONSTRUCTION<br>OR TO REGULATION AND CONTROL OF TRAFFIC<br>MAY BE SUBJECT TO CHANGE AS DEEMED<br>NECESSARY BY THE DEPARTMENT |       |         |                                      |           |
| VDOT Location & Design<br>Bristol, Virginia<br>HYDRAULIC ENGINEER | 2K(1)  |       |         |                                      |           |



PLAN VIEW :TEMPORARY SEDIMENT TRAP  
NOT TO SCALE



TYPICAL SECTION THRU WEIR  
ROCK CHECK DAM TYPE I  
NOT TO SCALE



TYPICAL SECTION (AA)THRU  
TEMPORARY SEDIMENT TRAP  
NOT TO SCALE

THESE PLANS ARE UNFINISHED  
AND UNAPPROVED AND ARE NOT  
TO BE USED FOR ANY TYPE  
OF CONSTRUCTION OR THE  
ACQUISITION OF RIGHT OF WAY.

NEW 6/01  
SPECIAL DESIGN SECTION  
DRAWING NO. A-6

| PROJECT      | SHEET NO. |
|--------------|-----------|
| 0081-095-829 | 2K(1)     |

PROJECT MANAGER James Jones, L.S., (276) 696-3257, (Bristol)  
SURVEYED BY, DATE Woolpert, Inc., (757) 549-3549 (Nov. 24, 2019)  
DESIGN BY Tamara Pritchard, P.E., (276) 696-3249 (Bristol)  
SUBSURFACE UTILITY BY, DATE \_\_\_\_\_

PH PLANS

THESE PLANS ARE UNFINISHED  
AND UNAPPROVED AND ARE NOT  
TO BE USED FOR ANY TYPE  
OF CONSTRUCTION OR THE  
ACQUISITION OF RIGHT OF WAY.

Utility Owners:

Electric:

Appalachian Power  
Scarlet Collie  
13563 Owens Drive  
Glade Spring, VA 24340  
(276) 429-4117

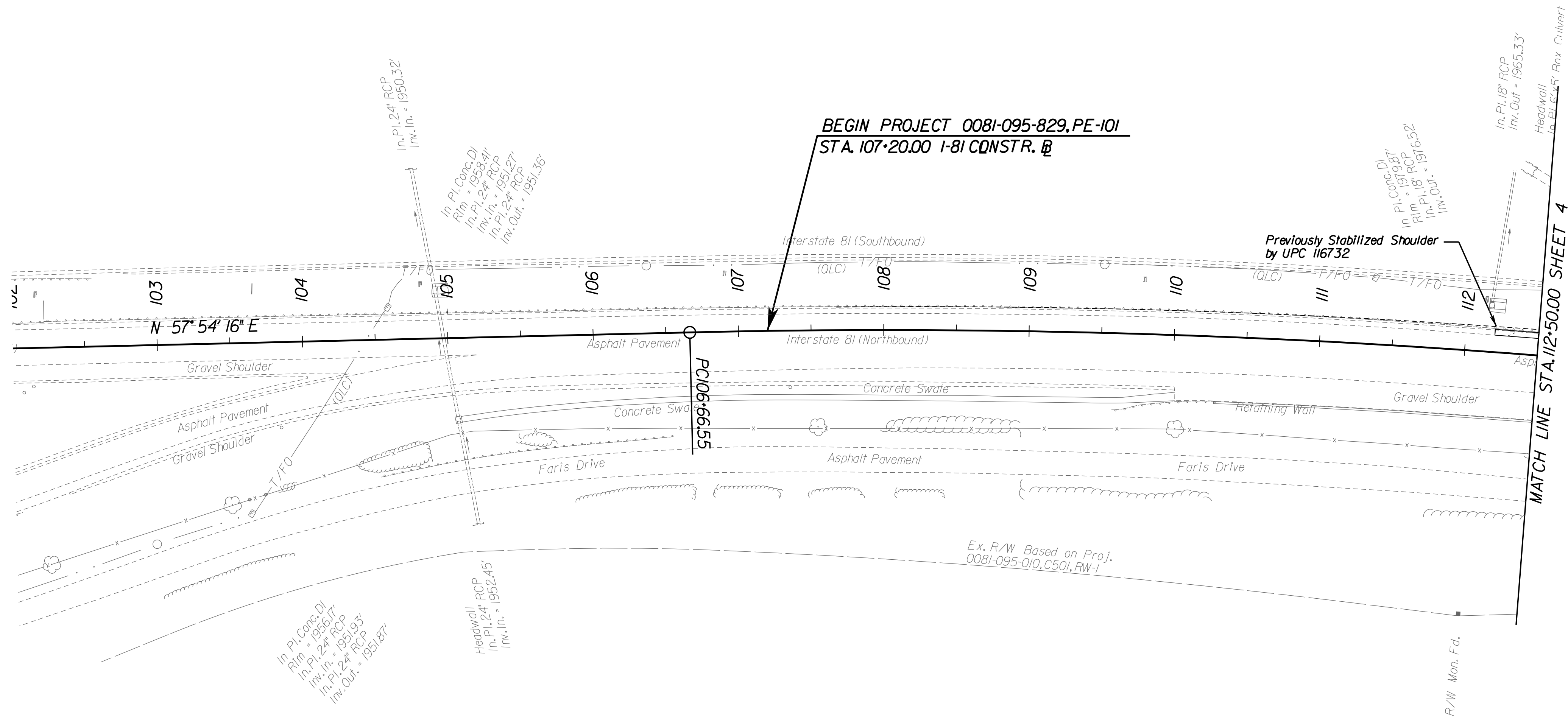
Communication:

Point Broadband  
Tim Nutter  
15022 Lee Highway  
Bristol, VA 24202  
(276) 492-1953

CenturyLink  
Steve Hastings  
175 South 1st Street  
Wytheville, VA 24382  
(276) 223-6264

Water:

Washington County Service Authority  
Kirk Maiden  
25122 Regal Drive  
Arlington, VA 24211  
(276) 676-6773



BEGIN PROJECT 0081-095-829, PE-101  
STA. 107+20.00 I-81 CONSTR. @

Curve 181NB\_3  
PI = 118+39.97  
DELTA = 23° 08' 54.00" (RT)  
D = 1' 00" 00"  
T = 1173.42'  
L = 2314.83'  
R = 5729.58'  
PC = 106+66.55  
PT = 129+81.38  
V = 75 MPH  
E = MATCH EXIST.

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Plotted By: ellieley

|                        |       |  |  |           |
|------------------------|-------|--|--|-----------|
| LIMITED ACCESS HIGHWAY |       | By Resolution of Highway Commission<br>dated October 4, 1956 |  |           |
| REVISED                | STATE | ROUTE  | PROJECT                                | SHEET NO. |
|                        | VA.   | 81   | 0081-095-829, PE-101;<br>RW-201, C-501 | 3         |

DESIGN FEATURES RELATING TO CONSTRUCTION  
OR TO REGULATION AND CONTROL OF TRAFFIC  
MAY BE SUBJECT TO CHANGE AS DEEMED  
NECESSARY BY THE DEPARTMENT

ROADWAY ITEMS LEGEND

- ST'D.GR-MGS1 REQ'D.
- ST'D.GR-MGS2 REQ'D.
- ST'D.GR-MGS3 REQ'D.
- ST'D.GR-MGS4 REQ'D.
- REMOVE EXISTING GUARDRAIL
- ST'D.GR-10 TYPE II REQ'D.
- ST'D.GR-MGS1, LONG POST REQ'D.
- ST'D.MC-3B, ASPHALT CURB AND ASPHALT CONCRETE CURB BACKUP MATERIAL REQ'D.
- ST'D.UD-4 UNDERDRAIN REQ'D.
- ST'D. UNDERDRAIN INSPECTION PORT REQ'D.

C --- CONSTRUCTION LIMITS IN CUTS  
F --- CONSTRUCTION LIMITS IN FILLS

XXX PARCEL NUMBER

X-X DRAINAGE STRUCTURE

PROPOSED PAVEMENT

PROPOSED FLEXIBLE PAVEMENT PLANING/OVERLAY

DEMOLITION OF PAVEMENT

REFERENCES  
(PROFILES, DETAIL & DRAINAGE DESCRIPTION SHEETS, ETC.)

Alignment Data IG

|                     |                         |                |
|---------------------|-------------------------|----------------|
| SCALE<br>0 50' 100' | PROJECT<br>0081-095-829 | SHEET NO.<br>3 |
|---------------------|-------------------------|----------------|

PROJECT MANAGER James Jones, L.S. (276) 696-3257 (Bristol)  
SURVEYED BY, DATE Woolpert Inc., (757) 549-3549 (Nov. 24, 2019)  
DESIGN BY Tamara Pritchard, P.E. (276) 696-3249 (Bristol)  
SUBSURFACE UTILITY BY, DATE \_\_\_\_\_

PH PLANS

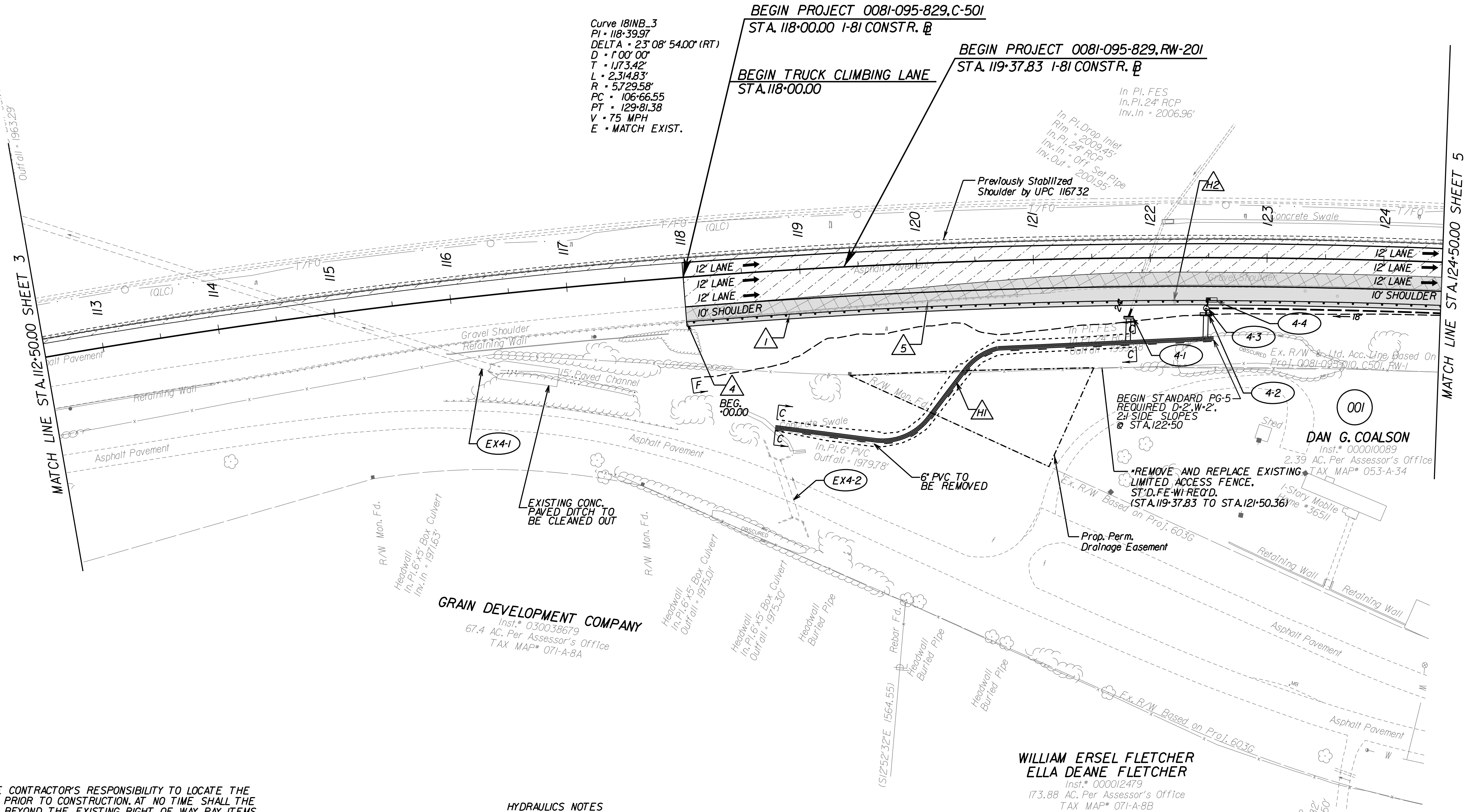
THESE PLANS ARE UNFINISHED  
AND UNAPPROVED AND ARE NOT  
TO BE USED FOR ANY TYPE  
OF CONSTRUCTION OR THE  
ACQUISITION OF RIGHT OF WAY.

dl16156004.dgn

Plotted By: ellitley

By Resolution of Highway Commission  
dated October 4, 1956

|  |       |       |  |           |
|--|-------|-------|--|-----------|
| LIMITED ACCESS HIGHWAY   |       | STATE |  | SHEET NO. |
| REVISED  | STATE | ROUTE | PROJECT                                |           |
|  | VA.   | 81    | 0081-095-829, PE-101;<br>RW-201, C-501 | 4         |
| DESIGN FEATURES RELATING TO CONSTRUCTION<br>OR TO REGULATION AND CONTROL OF TRAFFIC<br>MAY BE SUBJECT TO CHANGE AS DEEMED<br>NECESSARY BY THE DEPARTMENT |       |       |  |           |



ROADWAY ITEMS LEGEND

- 1 ST'D.GR-MGS1 REQ'D.
- 2 ST'D.GR-MGS2 REQ'D.
- 3 ST'D.GR-MGS3 REQ'D.
- 4 ST'D.GR-MGS4 REQ'D.
- 5 REMOVE EXISTING GUARDRAIL
- 6 ST'D.GR-10 TYPE II REQ'D.
- 7 ST'D.GR-MGS1, LONG POST REQ'D.
- 8 ST'D.MC-3B, ASPHALT CURB AND ASPHALT CONCRETE CURB BACKUP MATERIAL REQ'D.
- 9 ST'D.UD-4 UNDERDRAIN REQ'D.
- 10 ST'D.UNDERDRAIN INSPECTION PORT REQ'D.
- C CONSTRUCTION LIMITS IN CUTS
- F CONSTRUCTION LIMITS IN FILLS
- XXX PARCEL NUMBER
- X-X DRAINAGE STRUCTURE
- PROPOSED PAVEMENT
- PROPOSED FLEXIBLE PAVEMENT PLANING/OVERLAY
- DEMOLITION OF PAVEMENT
- ← DENOTES GRADED 'V' DITCH

| REFERENCES<br>(PROFILES, DETAIL & DRAINAGE<br>DESCRIPTION SHEETS, ETC.) |        |
|---|--------|
| Alignment Data  | 1G     |
| Typical Section   | 2A(1)  |
| Profile 1-81 NB   | 4A     |
| E & S   | 4B, 4C |
| Right Of Way  | 4RW    |

\*NOTE: IT IS THE CONTRACTOR'S RESPONSIBILITY TO LOCATE THE  
EXISTING FENCE PRIOR TO CONSTRUCTION. AT NO TIME SHALL THE  
WORK PROGRESS BEYOND THE EXISTING RIGHT OF WAY. PAY ITEMS  
FOR FENCE REPLACEMENT HAVE BEEN PROVIDED IN THE CONTRACT.  
SHOULD THE FENCE NOT NEED TO BE DISMANTLED DURING  
CONSTRUCTION, THOSE PAY ITEMS CAN BE ELIMINATED.

HYDRAULICS NOTES

- H1 PROPOSED STORMWATER  
CONVEYANCE CHANNEL  
STANDARD PG-5 REQUIRED
- H2 REMOVE EXISTING EW-12 STRUCTURE  
DAYLIGHT CROSS DRAIN / UNDER DRAIN  
INSTALL PROPOSED STANDARD EW-12

WILLIAM ERSEL FLETCHER  
ELLA DEANE FLETCHER  
Inst.\* 000012479  
173.88 AC, Per Assessor's Office  
TAX MAP\* 071-A-8B

|                     |                         |                |
|---------------------|-------------------------|----------------|
| SCALE<br>0 50' 100' | PROJECT<br>0081-095-829 | SHEET NO.<br>4 |
|---------------------|-------------------------|----------------|



PROJECT MANAGER James Jones, L.S., (276) 696-3257 (Bristol)  
SURVEYED BY, DATE Woolpert Inc., (757) 549-3549 (Nov. 24, 2019)  
DESIGN BY Tamara Pritchard, P.E., (276) 696-3249 (Bristol)  
SUBSURFACE UTILITY BY, DATE

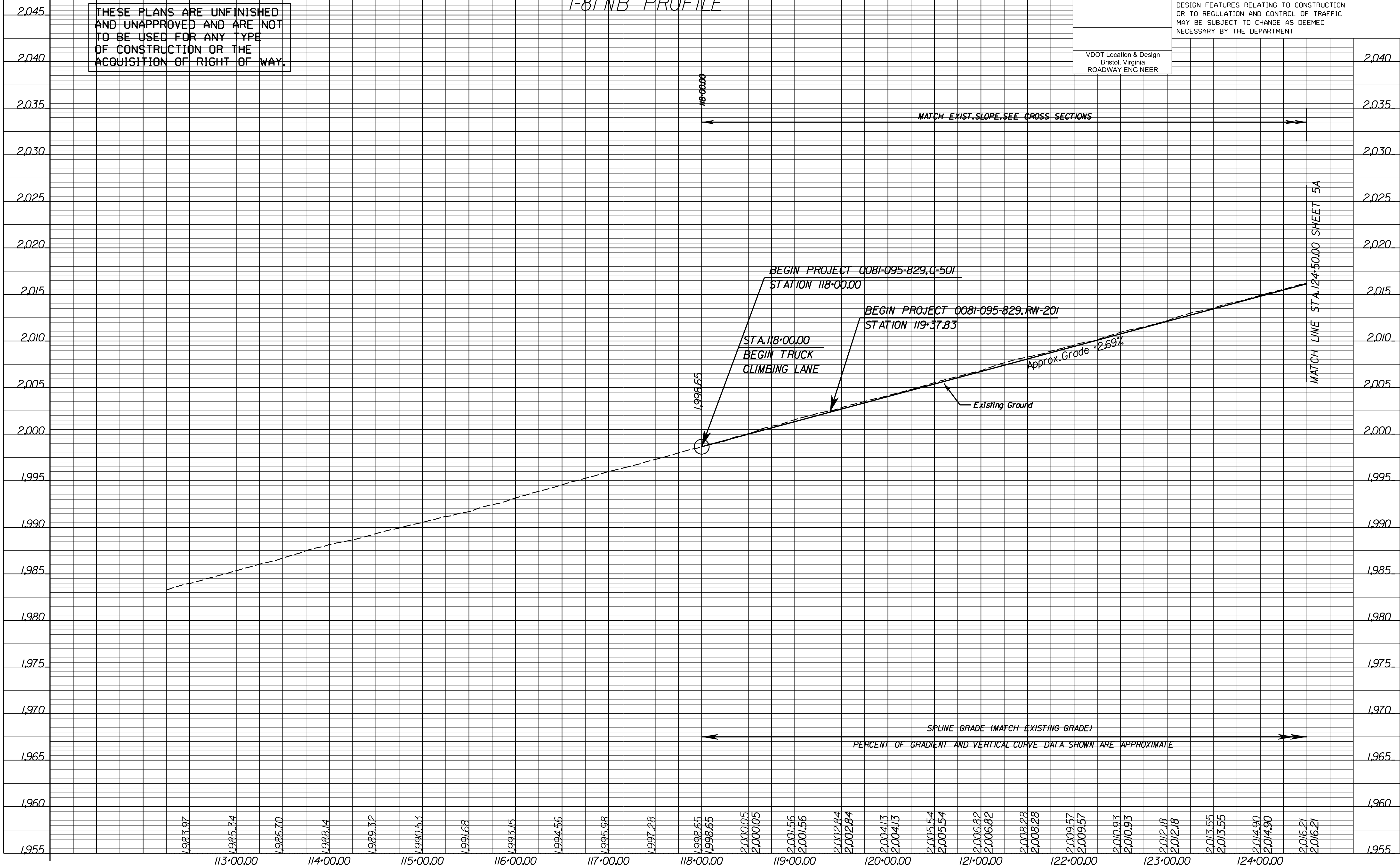
PH PLANS

THESE PLANS ARE UNFINISHED  
AND UNAPPROVED AND ARE NOT  
TO BE USED FOR ANY TYPE  
OF CONSTRUCTION OR THE  
ACQUISITION OF RIGHT OF WAY.

I-81 NB PROFILE

VDOT Location & Design  
Bristol, Virginia  
ROADWAY ENGINEER

DESIGN FEATURES RELATING TO CONSTRUCTION  
OR TO REGULATION AND CONTROL OF TRAFFIC  
MAY BE SUBJECT TO CHANGE AS DEEMED  
NECESSARY BY THE DEPARTMENT





PROJECT MANAGER James Jones, L.S., (276) 696-3257 (Bristol)  
SURVEYED BY, DATE Woolpert Inc., (757) 549-3549 (Nov. 24, 2019)  
DESIGN BY Tamara Pritchard, P.E., (276) 696-3249 (Bristol)  
SUBSURFACE UTILITY BY, DATE Woolpert Inc., (757) 549-3549 (Nov. 24, 2019)

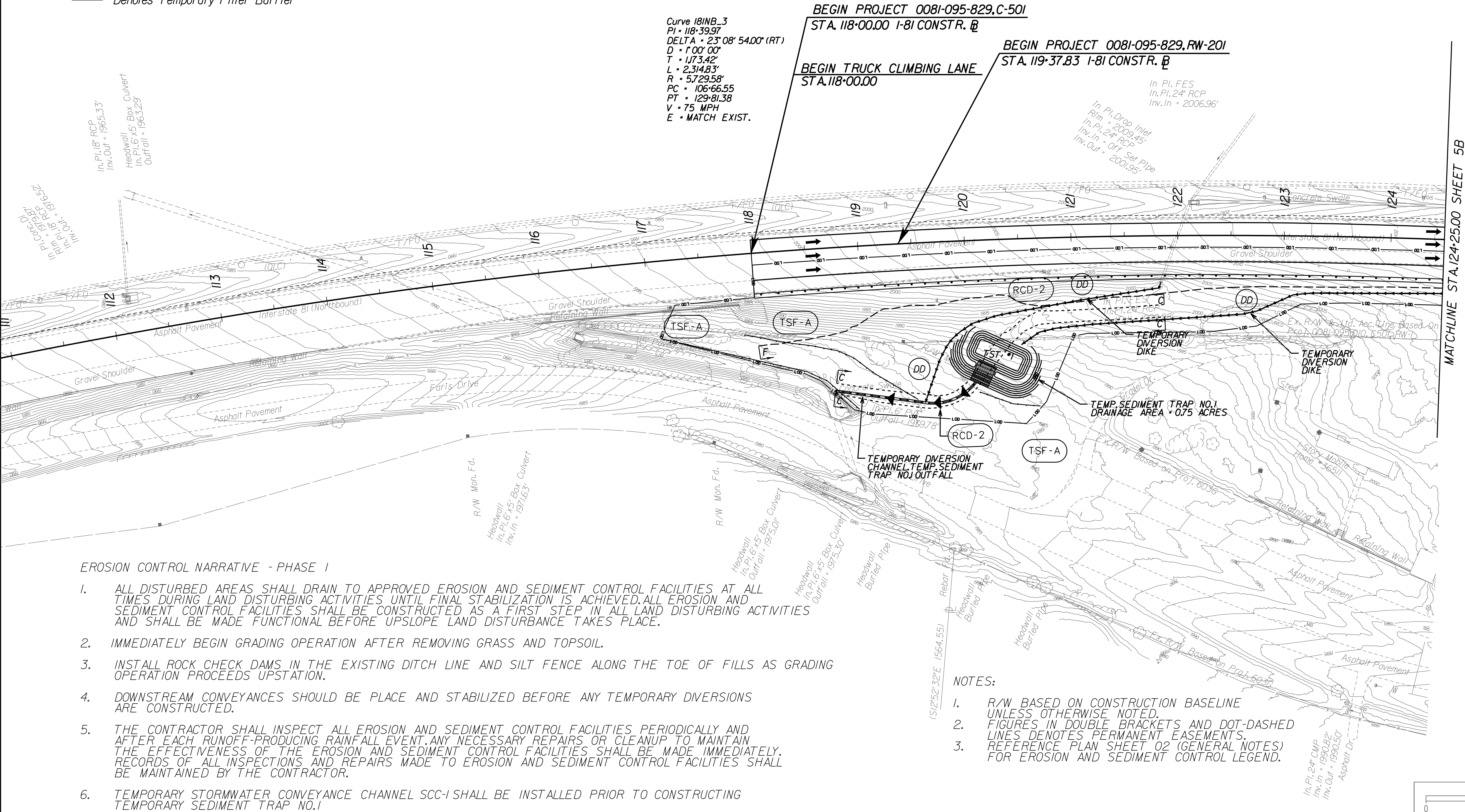
# EROSION & SEDIMENT CONTROL PLAN PHASE I

## PH PLANS

THESE PLANS ARE UNFINISHED  
AND UNAPPROVED AND ARE NOT  
TO BE USED FOR ANY TYPE  
OF CONSTRUCTION OR THE  
ACQUISITION OF RIGHT OF WAY.

### HYDRAULICS LEGEND

- 3A Denotes Drainage Information
- Denotes Permanent Rock Check Dams, Ty.I
- Denotes Temporary Rock Check Dams, Ty.II
- 3-3 Denotes Drainage Structure
- Denotes Temporary Silt Fence
- Denotes Temporary Filter Barrier



### EROSION CONTROL NARRATIVE - PHASE I

- ALL DISTURBED AREAS SHALL DRAIN TO APPROVED EROSION AND SEDIMENT CONTROL FACILITIES AT ALL TIMES DURING LAND DISTURBING ACTIVITIES UNTIL FINAL STABILIZATION IS ACHIEVED. ALL EROSION AND SEDIMENT CONTROL FACILITIES SHALL BE CONSTRUCTED AS A FIRST STEP IN ALL LAND DISTURBING ACTIVITIES AND SHALL BE MADE FUNCTIONAL BEFORE UPSLOPE LAND DISTURBANCE TAKES PLACE.
- IMMEDIATELY BEGIN GRADING OPERATION AFTER REMOVING GRASS AND TOPSOIL.
- INSTALL ROCK CHECK DAMS IN THE EXISTING DITCH LINE AND SILT FENCE ALONG THE TOE OF FILLS AS GRADING OPERATION PROCEEDS UPSTATION.
- DOWNSTREAM CONVEYANCES SHOULD BE IN PLACE AND STABILIZED BEFORE ANY TEMPORARY DIVERSIONS ARE CONSTRUCTED.
- THE CONTRACTOR SHALL INSPECT ALL EROSION AND SEDIMENT CONTROL FACILITIES PERIODICALLY AND AFTER EACH RUNOFF-PRODUCING RAINFALL EVENT. ANY NECESSARY REPAIRS OR CLEANUP TO MAINTAIN THE EFFECTIVENESS OF THE EROSION AND SEDIMENT CONTROL FACILITIES SHALL BE MADE IMMEDIATELY. RECORDS OF ALL INSPECTIONS AND REPAIRS MADE TO EROSION AND SEDIMENT CONTROL FACILITIES SHALL BE MAINTAINED BY THE CONTRACTOR.
- TEMPORARY STORMWATER CONVEYANCE CHANNEL SCC-1 SHALL BE INSTALLED PRIOR TO CONSTRUCTING TEMPORARY SEDIMENT TRAP NO.1

### NOTES:

- R/W BASED ON CONSTRUCTION BASELINE UNLESS OTHERWISE NOTED.
- FIGURES IN DOUBLE BRACKETS AND DOT-DASHED LINES DENOTES PERMANENT EASEMENTS.
- REFERENCE PLAN SHEET 02 (GENERAL NOTES) FOR EROSION AND SEDIMENT CONTROL LEGEND.

dl161656004B.dgn  
Plotted By: elliley

|                        |  |       |       |                               |           |
|------------------------|--|-------|-------|-------------------------------|-----------|
| LIMITED ACCESS HIGHWAY | By Resolution of Highway Commission<br>dated October 4, 1956 |       |       |                               |           |
|                        | REVISED  | STATE | ROUTE | STATE PROJECT                 | SHEET NO. |
|                        |  | VA.   | 81    | 0081-095-829, RW-20I<br>C-50I | 4B        |

DESIGN FEATURES RELATING TO CONSTRUCTION  
OR TO REGULATION AND CONTROL OF TRAFFIC  
MAY BE SUBJECT TO CHANGE AS DEEMED  
NECESSARY BY THE DEPARTMENT

### ROADWAY ITEMS LEGEND

- CONSTRUCTION LIMITS IN CUTS
- CONSTRUCTION LIMITS IN FILLS
- PROPOSED PAVEMENT
- PROPOSED FLEXIBLE PAVEMENT PLANING/OVERLAY
- DEMOLITION OF PAVEMENT

### REFERENCES (PROFILES, DETAIL & DRAINAGE DESCRIPTION SHEETS, ETC.)

|              |    |
|--------------|----|
| Roadway      | 4  |
| Profile I-81 | 4A |
| E&S Legend   | 2  |

### SUGGESTED EROSION AND SEDIMENT CONTROL PLANS - PHASE I

|                     |                         |                 |
|---------------------|-------------------------|-----------------|
| SCALE<br>0 50' 100' | PROJECT<br>0081-095-829 | SHEET NO.<br>4B |
|---------------------|-------------------------|-----------------|





PROJECT MANAGER James Jones, L.S. (276) 696-3257 (Bristol)  
SURVEYED BY, DATE Woolpert Inc., (757) 549-3549 (Nov. 24, 2019)  
DESIGN BY Tamara Pritchard, P.E. (276) 696-3249 (Bristol)  
SUBSURFACE UTILITY BY, DATE Woolpert Inc., (757) 549-3549 (Nov. 24, 2019)

| <i>Element</i> | <i>Direction</i> | <i>Distance</i> | <i>Length</i> | <i>Radius</i> |
|----------------|------------------|-----------------|---------------|---------------|
|                |                  |                 |               |               |
|                |                  |                 |               |               |
|                |                  |                 |               |               |

| APPROXIMATE AREA TABLE |          |               |                         |                             |
|------------------------|----------|---------------|-------------------------|-----------------------------|
| PARCEL *               | R/W TAKE | FEE REMAINDER | PERM. DRAINAGE EASEMENT | TEMP. CONSTRUCTION EASEMENT |
| 001                    |          | 2.39 AC       | 8,831 SF                |                             |

THIS RIGHT OF WAY SHEET REPRESENTS A FIELD RUN PERIMETER SURVEY OF THE PROPOSED R/W LIMITS. ALL OTHER ADJOINING/DEPARTING BOUNDARY LINES SHOWN ARE COMPILED FROM VARIOUS SOURCES; FOUND FIELD MONUMENTATION, METES AND BOUNDS DESCRIPTIONS, AND RECORDED PLATS. THE ADJOINING LINES DO NOT REPRESENT A FIELD RUN SURVEY OF THE ADJOINING PROPERTIES AND ARE BEST FIT BASED ON COMPILED DATA. ALL AREAS SHOWN FOR R/W TAKES AND EASEMENTS ARE APPROXIMATE ONLY.

RIGHT OF WAY MONUMENTATION TO BE SET UPON  
COMPLETION OF CONSTRUCTION.

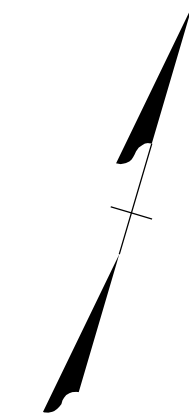
ALL PROPOSED RIGHT-OF-WAY MONUMENTATION OFFSET/  
STATIONS AND PROPOSED EASEMENT OFFSET/STATIONS  
SHOWN HEREON ARE BASED OFF OF THE I-81 NB  
BASELINE.

⊙ PROPOSED R/W MONUMENT

(00.00'  
-00.00')

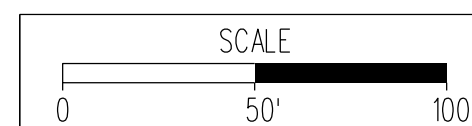
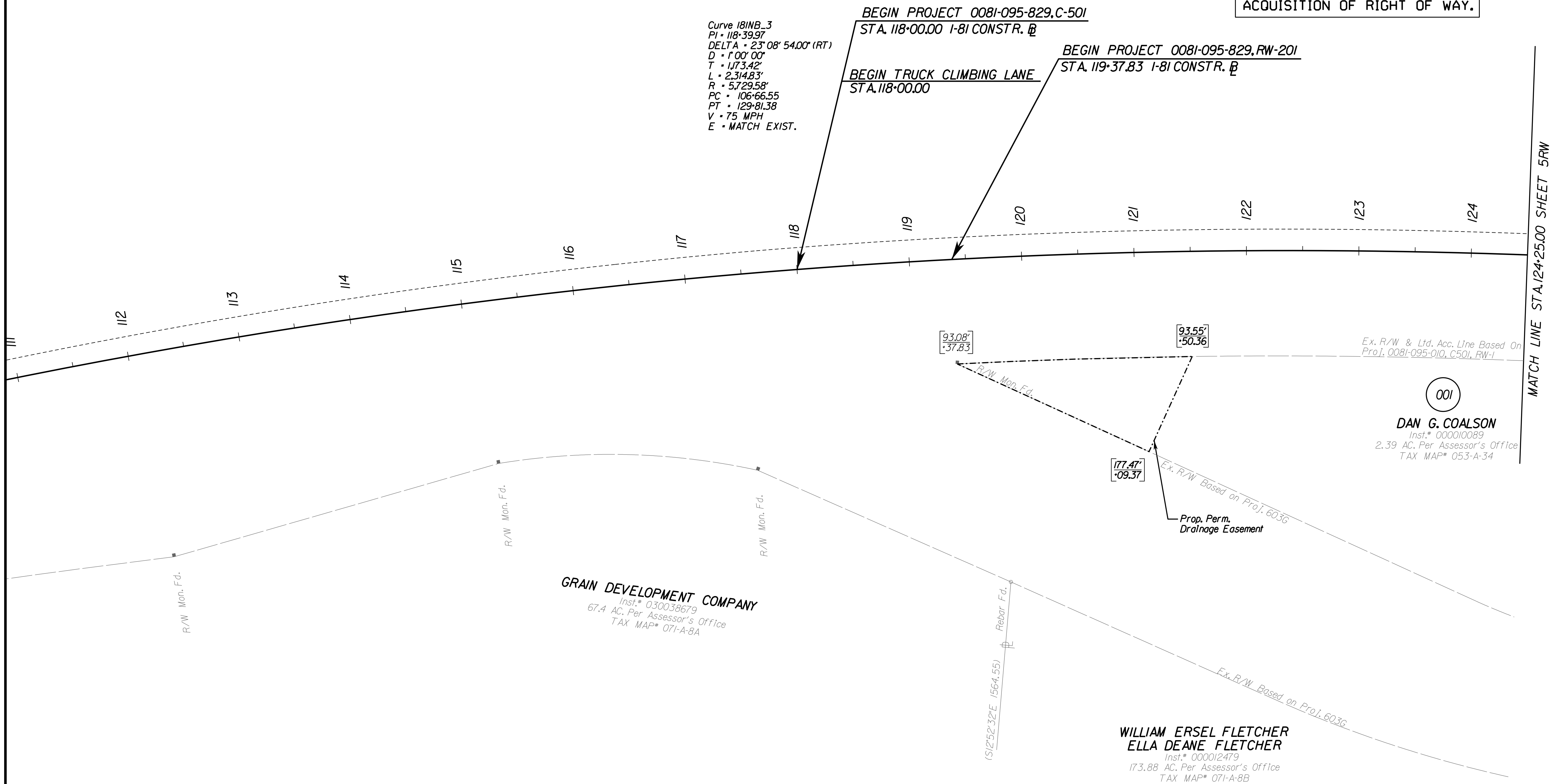
FIGURES IN PARENTHESES AND  
DASH-DOT-DOT LINES DENOTE  
PROPOSED TEMPORARY  
CONSTRUCTION EASEMENTS.

[00.00'  
•00.00'] FIGURES IN DOUBLE BRACKETS  
AND DOT-DASHED LINES DENOTE  
PERMANENT DRAINAGE EASEMENTS.



## PH PLANS

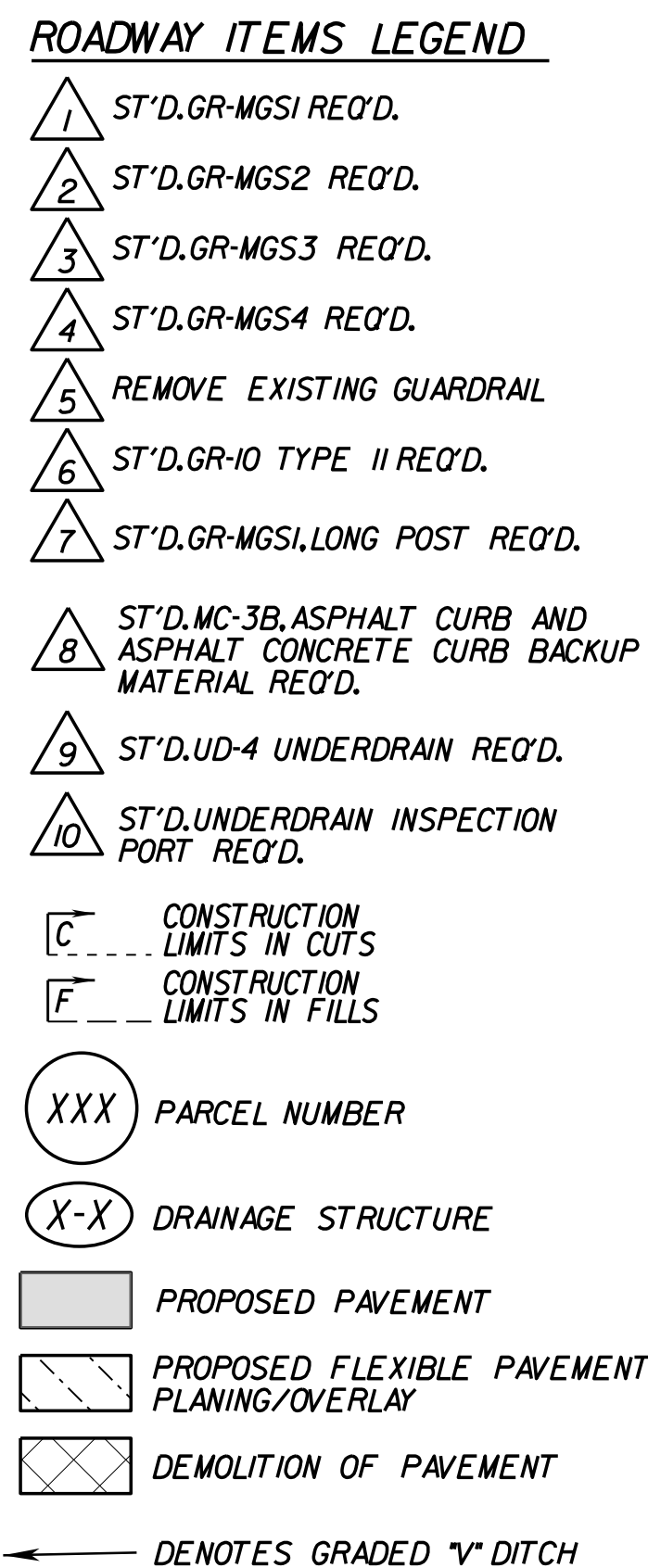
THESE PLANS ARE UNFINISHED  
AND UNAPPROVED AND ARE NOT  
TO BE USED FOR ANY TYPE  
OF CONSTRUCTION OR THE  
ACQUISITION OF RIGHT OF WAY.



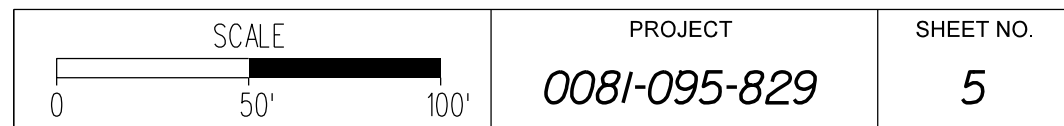
|              |           |
|--------------|-----------|
| PROJECT      | SHEET NO. |
| 0081-095-829 | 4RW       |

PROJECT MANAGER James Jones, L.S. (276) 696-3257 (Bristol)  
SURVEYED BY, DATE Woolpert Inc. (757) 549-3549 (Nov. 24, 2019)  
DESIGN BY Tamara Pritchard, P.E. (276) 696-3249 (Bristol)  
SUBSURFACE UTILITY BY, DATE \_\_\_\_\_

THESE PLANS ARE UNFINISHED  
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TO BE USED FOR ANY TYPE  
OF CONSTRUCTION OR THE  
ACQUISITION OF RIGHT OF WAY.

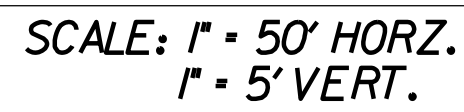


| REFERENCES<br>( PROFILES,DETAIL & DRAINAGE<br>DESCRIPTION SHEETS, ETC.) |       |
|---|-------|
| Alignment Data  | IG    |
| Typical Section   | 2A(1) |
| Profile 1-81 NB   | 5A    |
| E & S   | 5B,5C |



VDOT Location & Design  
Bristol, Virginia  
ROADWAY ENGINEER

DESIGN FEATURES RELATING TO CONSTRUCTION  
OR TO REGULATION AND CONTROL OF TRAFFIC  
MAY BE SUBJECT TO CHANGE AS DEEMED  
NECESSARY BY THE DEPARTMENT



PROJECT  
21-095-829

SHEET NO.

5A



PROJECT MANAGER James Jones, L.S. (276) 696-3257 (Bristol)  
SURVEYED BY, DATE Woolpert Inc., (757) 549-3549 (Nov. 24, 2019)  
DESIGN BY Tamara Pritchard, P.E. (276) 696-3249 (Bristol)  
SUBSURFACE UTILITY BY, DATE Woolpert Inc., (757) 549-3549 (Nov. 24, 2019)

# EROSION & SEDIMENT CONTROL PLAN PHASE I

## PH PLANS

THESE PLANS ARE UNFINISHED  
AND UNAPPROVED AND ARE NOT  
TO BE USED FOR ANY TYPE  
OF CONSTRUCTION OR THE  
ACQUISITION OF RIGHT OF WAY.

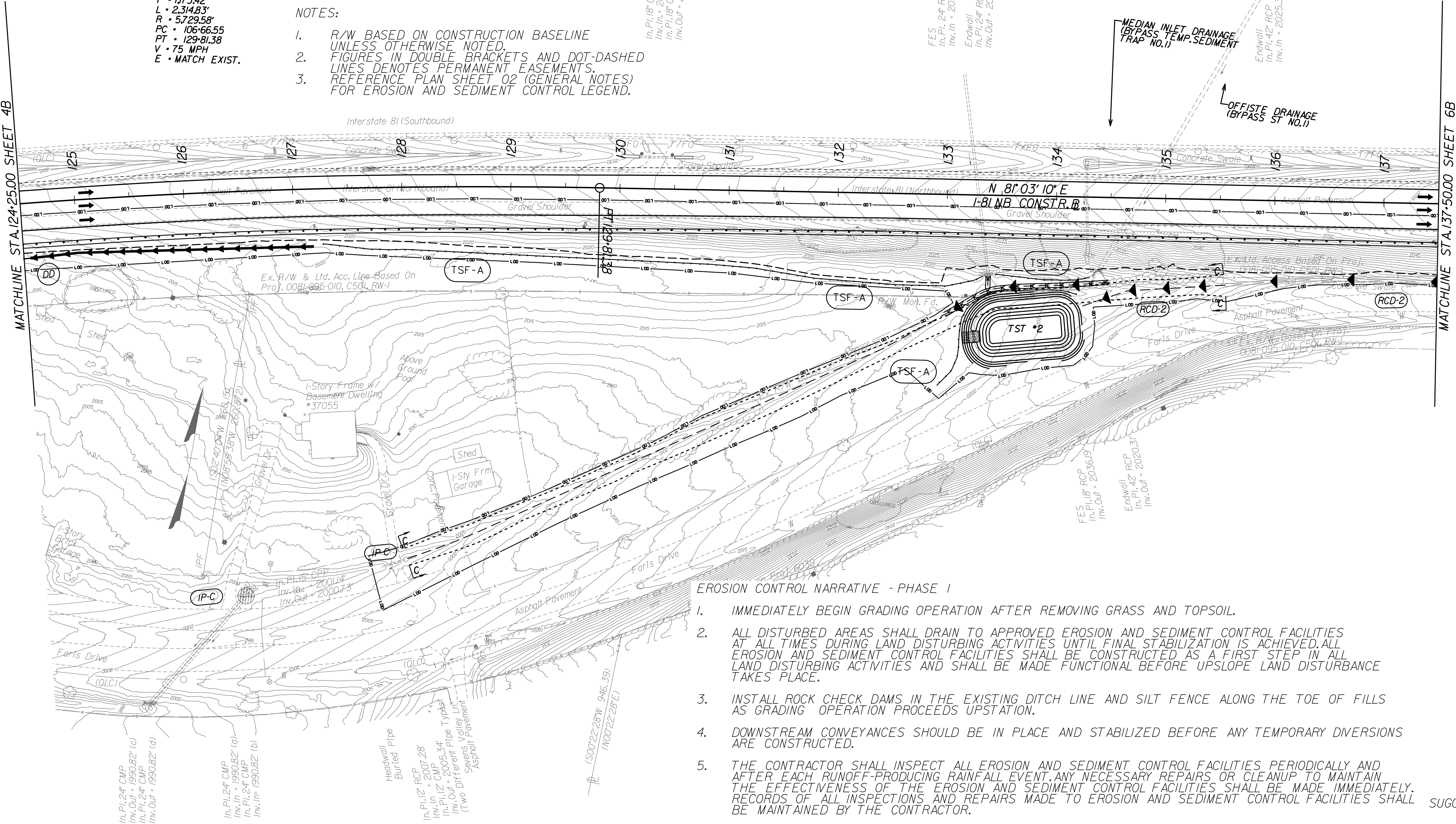
### HYDRAULICS LEGEND

- 3A Denotes Drainage Information  
◁ Denotes Permanent Rock Check Dams, Ty.I  
◄ Denotes Temporary Rock Check Dams, Ty.II  
3-3 Denotes Drainage Structure  
—x Denotes Temporary Silt Fence  
— Denotes Temporary Filter Barrier

### NOTES:

- R/W BASED ON CONSTRUCTION BASELINE  
UNLESS OTHERWISE NOTED.
- FIGURES IN DOUBLE BRACKETS AND DOT-DASHED  
LINES DENOTES PERMANENT EASEMENTS.
- REFERENCE PLAN SHEET 02 (GENERAL NOTES)  
FOR EROSION AND SEDIMENT CONTROL LEGEND.

Curve 181NB\_3  
PI = 118+39.97  
DELTA = 23° 08' 54.00" (RT)  
D = 1' 00' 00"  
T = 1173.42'  
L = 2314.83'  
R = 5729.58'  
PC = 106+66.55  
PT = 129+81.38  
V = 75 MPH  
E = MATCH EXIST.



### ROADWAY ITEMS LEGEND

- CONSTRUCTION LIMITS IN CUTS  
CONSTRUCTION LIMITS IN FILLS  
PROPOSED PAVEMENT  
PROPOSED FLEXIBLE PAVEMENT  
PLANING/OVERLAY  
DEMOLITION OF PAVEMENT

### REFERENCES (PROFILES, DETAIL & DRAINAGE DESCRIPTION SHEETS, ETC.)

|               |    |
|---------------|----|
| ROADWAY PLANS | 5  |
| PROFILE 1-81  | 5A |
| ESC LEGEND    | 2  |

### EROSION CONTROL NARRATIVE - PHASE I

- IMMEDIATELY BEGIN GRADING OPERATION AFTER REMOVING GRASS AND TOPSOIL.
- ALL DISTURBED AREAS SHALL DRAIN TO APPROVED EROSION AND SEDIMENT CONTROL FACILITIES AT ALL TIMES DURING LAND DISTURBING ACTIVITIES UNTIL FINAL STABILIZATION IS ACHIEVED. ALL EROSION AND SEDIMENT CONTROL FACILITIES SHALL BE CONSTRUCTED AS A FIRST STEP IN ALL LAND DISTURBING ACTIVITIES AND SHALL BE MADE FUNCTIONAL BEFORE UPSLOPE LAND DISTURBANCE TAKES PLACE.
- INSTALL ROCK CHECK DAMS IN THE EXISTING DITCH LINE AND SILT FENCE ALONG THE TOE OF FILLS AS GRADING OPERATION PROCEEDS UPSTATION.
- DOWNSTEAM CONVEYANCES SHOULD BE IN PLACE AND STABILIZED BEFORE ANY TEMPORARY DIVERSIONS ARE CONSTRUCTED.
- THE CONTRACTOR SHALL INSPECT ALL EROSION AND SEDIMENT CONTROL FACILITIES PERIODICALLY AND AFTER EACH RUNOFF-PRODUCING RAINFALL EVENT. ANY NECESSARY REPAIRS OR CLEANUP TO MAINTAIN THE EFFECTIVENESS OF THE EROSION AND SEDIMENT CONTROL FACILITIES SHALL BE MADE IMMEDIATELY. RECORDS OF ALL INSPECTIONS AND REPAIRS MADE TO EROSION AND SEDIMENT CONTROL FACILITIES SHALL BE MAINTAINED BY THE CONTRACTOR.

### SUGGESTED EROSION AND SEDIMENT CONTROL PLANS - PHASE I

| SCALE      | PROJECT      | SHEET NO. |
|------------|--------------|-----------|
| 0 50' 100' | 0081-095-829 | 5B        |



PROJECT MANAGER James Jones, L.S. (276) 696-3257 (Bristol)  
SURVEYED BY, DATE Woolpert Inc., (757) 549-3549 (Nov. 24, 2019)  
DESIGN BY Tamara Pritchard, P.E. (276) 696-3249 (Bristol)  
SUBSURFACE UTILITY BY, DATE Woolpert Inc., (757) 549-3549 (Nov. 24, 2019)

# EROSION & SEDIMENT CONTROL PLAN PHASE II

## PH PLANS

THESE PLANS ARE UNFINISHED  
AND UNAPPROVED AND ARE NOT  
TO BE USED FOR ANY TYPE  
OF CONSTRUCTION OR THE  
ACQUISITION OF RIGHT OF WAY.

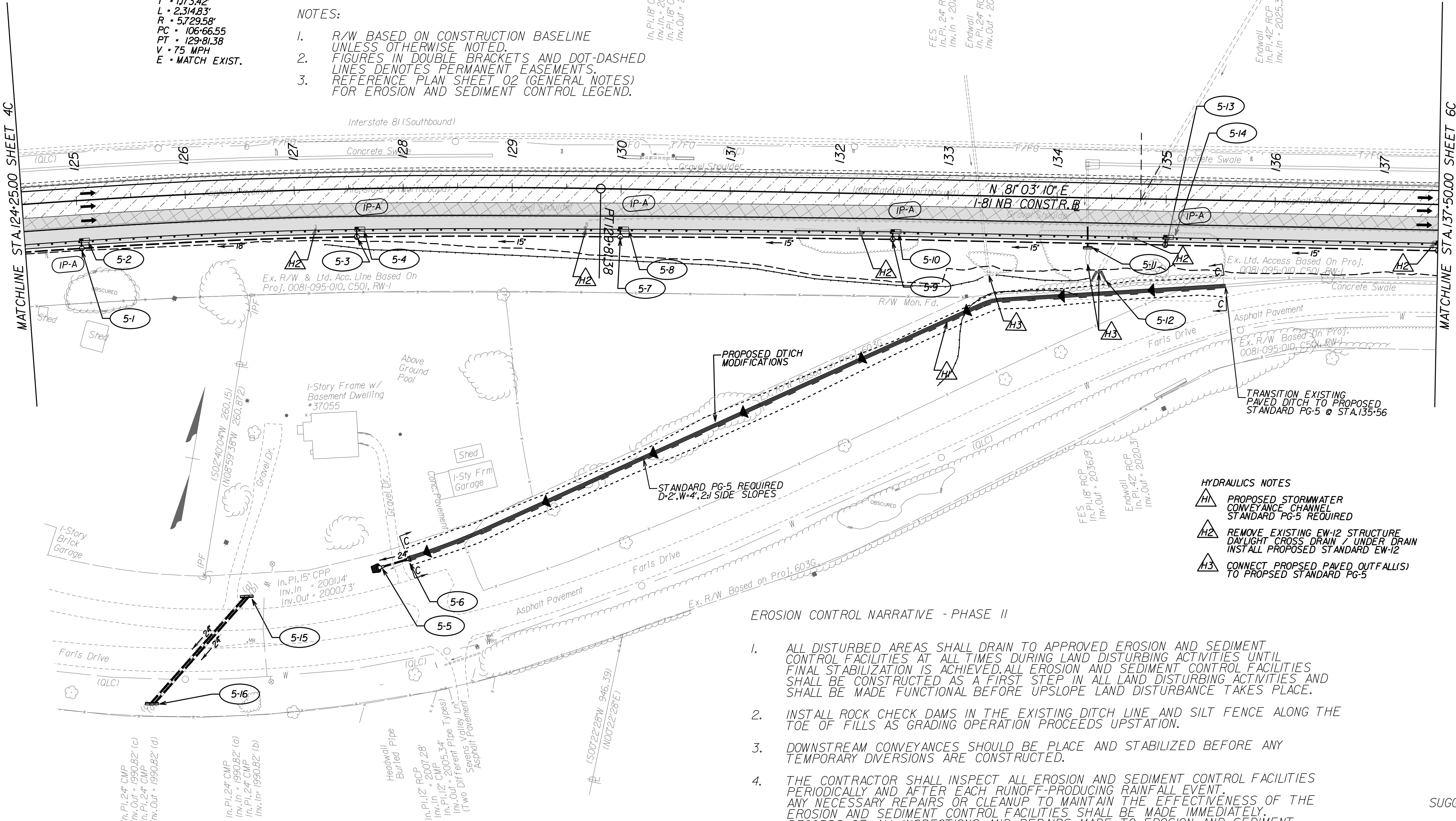
### HYDRAULICS LEGEND

- 3A Denotes Drainage Information
- Denotes Permanent Rock Check Dams, Ty. I
- Denotes Temporary Rock Check Dams, Ty. II
- (3-3) Denotes Drainage Structure
- Denotes Temporary Silt Fence
- Denotes Temporary Filter Barrier

Curve 181NB\_3  
PI = 118+39.97  
DELTA = 23° 08' 54.00" (RT)  
D = 1' 00' 00"  
T = 1173.42'  
L = 2314.83'  
R = 5729.58'  
PC = 106+66.55  
PT = 129+81.38  
V = 75 MPH  
E = MATCH EXIST.

### NOTES:

- R/W BASED ON CONSTRUCTION BASELINE UNLESS OTHERWISE NOTED.
- FIGURES IN DOUBLE BRACKETS AND DOT-DASHED LINES DENOTES PERMANENT EASEMENTS.
- REFERENCE PLAN SHEET 02 (GENERAL NOTES) FOR EROSION AND SEDIMENT CONTROL LEGEND.



### ROADWAY ITEMS LEGEND

- CONSTRUCTION LIMITS IN CUTS
- CONSTRUCTION LIMITS IN FILLS
- PROPOSED PAVEMENT
- PROPOSED FLEXIBLE PAVEMENT PLANING/OVERLAY
- DEMOLITION OF PAVEMENT

### HYDRAULICS NOTES

- PROPOSED STORMWATER CONVEYANCE CHANNEL STANDARD PG-5 REQUIRED
- REMOVE EXISTING EW-12 STRUCTURE DAYLIGHT CROSS DRAIN / UNDER DRAIN INSTALL PROPOSED STANDARD EW-12
- CONNECT PROPOSED PAVED OUTFALL(S) TO PROPOSED STANDARD PG-5

### REFERENCES (PROFILES, DETAIL & DRAINAGE DESCRIPTION SHEETS, ETC.)

|               |    |
|---------------|----|
| ROADWAY PLANS | 5  |
| PROFILE I-81  | 5A |
| ESC LEGEND    | 2  |

### EROSION CONTROL NARRATIVE - PHASE II

- ALL DISTURBED AREAS SHALL DRAIN TO APPROVED EROSION AND SEDIMENT CONTROL FACILITIES AT ALL TIMES DURING LAND DISTURBING ACTIVITIES UNTIL FINAL STABILIZATION IS ACHIEVED. ALL EROSION AND SEDIMENT CONTROL FACILITIES SHALL BE CONSTRUCTED AS A FIRST STEP IN ALL LAND DISTURBING ACTIVITIES AND SHALL BE MADE FUNCTIONAL BEFORE UPSLOPE LAND DISTURBANCE TAKES PLACE.
- INSTALL ROCK CHECK DAMS IN THE EXISTING DITCH LINE AND SILT FENCE ALONG THE TOE OF FILLS AS GRADING OPERATION PROCEEDS UPSTATION.
- DOWNSIDE CONVEYANCES SHOULD BE IN PLACE AND STABILIZED BEFORE ANY TEMPORARY DIVERSIONS ARE CONSTRUCTED.
- THE CONTRACTOR SHALL INSPECT ALL EROSION AND SEDIMENT CONTROL FACILITIES PERIODICALLY AND AFTER EACH RUNOFF-PRODUCING RAINFALL EVENT. ANY NECESSARY REPAIRS OR CLEANUP TO MAINTAIN THE EFFECTIVENESS OF THE EROSION AND SEDIMENT CONTROL FACILITIES SHALL BE MADE IMMEDIATELY. RECORDS OF ALL INSPECTIONS AND REPAIRS MADE TO EROSION AND SEDIMENT CONTROL FACILITIES SHALL BE MAINTAINED BY THE CONTRACTOR.

### SUGGESTED EROSION AND SEDIMENT CONTROL PLANS - PHASE II

| SCALE      | PROJECT      | SHEET NO. |
|------------|--------------|-----------|
| 0 50' 100' | 0081-095-829 | 5C        |

PROJECT MANAGER James Jones, L.S., (276) 696-3257 (Bristol)  
SURVEYED BY, DATE Woolpert Inc., (757) 549-3549 (Nov. 24, 2019)  
DESIGN BY Tamara Pritchard, P.E., (276) 696-3249 (Bristol)  
SUBSURFACE UTILITY BY, DATE Woolpert Inc., (757) 549-3549 (Nov. 24, 2019)

PH PLANS

THESE PLANS ARE UNFINISHED  
AND UNAPPROVED AND ARE NOT  
TO BE USED FOR ANY TYPE  
OF CONSTRUCTION OR THE  
ACQUISITION OF RIGHT OF WAY.

NOTES:

THIS RIGHT OF WAY SHEET REPRESENTS A FIELD  
RUN PERIMETER SURVEY OF THE PROPOSED R/W  
LIMITS. ALL OTHER ADJOINING/DEPARTING BOUNDARY  
LINES SHOWN ARE COMPILED FROM VARIOUS SOURCES:  
FOUND FIELD MONUMENTATION, METES AND BOUNDS  
DESCRIPTIONS, AND RECORDED PLATS. THE ADJOINING  
LINES DO NOT REPRESENT A FIELD RUN SURVEY OF  
THE ADJOINING PROPERTIES AND ARE BEST FIT  
BASED ON COMPILED DATA. ALL AREAS SHOWN FOR R/W  
TAKES AND EASEMENTS ARE APPROXIMATE ONLY.

THIS SURVEY DATUM IS BASED ON VDOT  
PROJECT 0081-095-829, RW-201, C501 UPC:116156

RIGHT OF WAY MONUMENTATION TO BE SET UPON  
COMPLETION OF CONSTRUCTION.

NO CEMETERY SITES WERE OBSERVED OF THE SUBJECT  
PROPERTY. THIS DOES NOT PRECLUDE THEIR EXISTENCE.

ALL PROPOSED RIGHT-OF-WAY MONUMENTATION OFFSET/  
STATIONS AND PROPOSED EASEMENT OFFSET/STATIONS  
SHOWN HEREON ARE BASED OFF OF THE I-81 NB  
BASELINE.

LEGEND

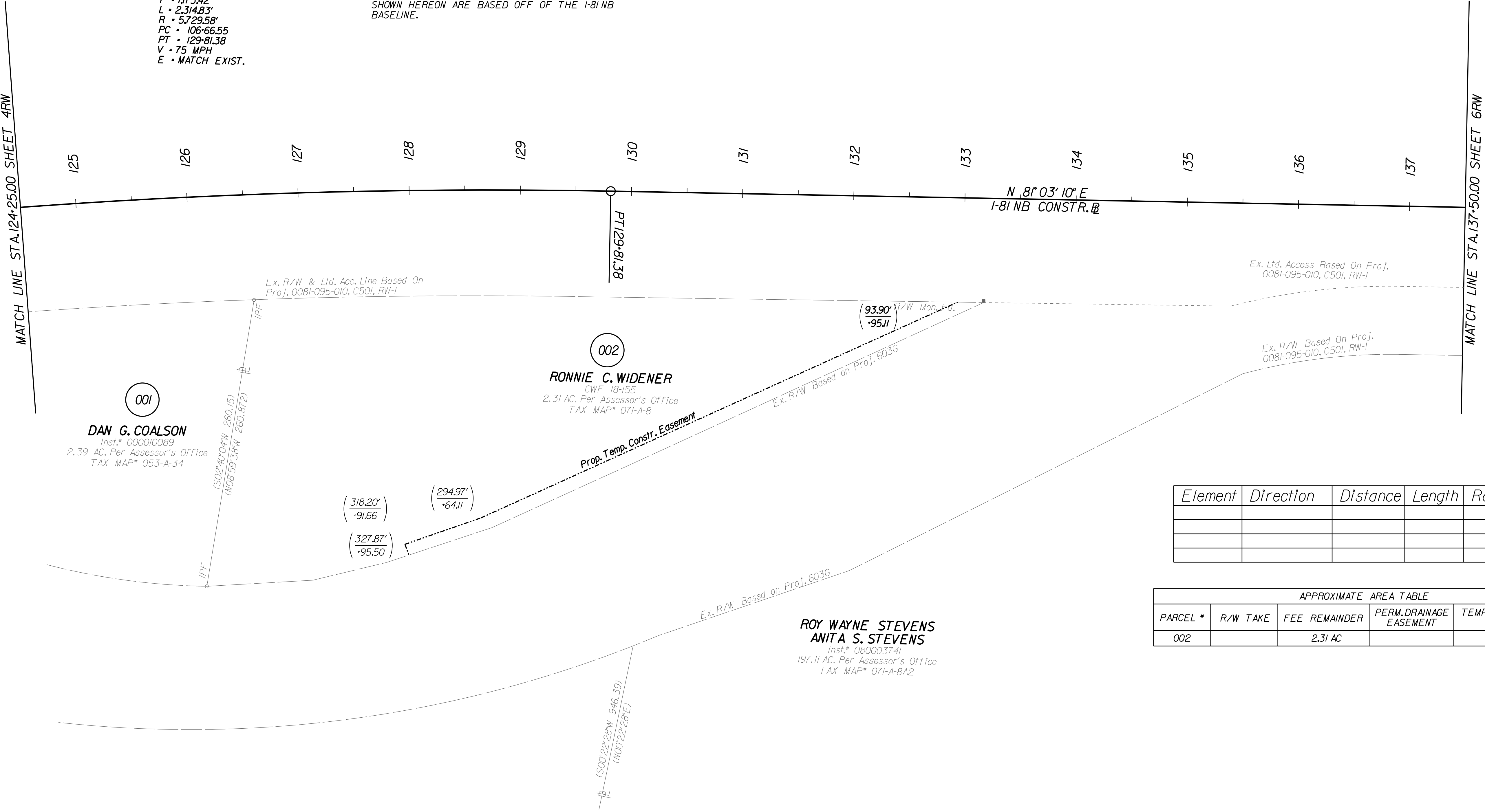
○ PROPOSED R/W MONUMENT

00.00'  
-00.00' FIGURES AND CONTINUOUS  
LINES DENOTE PROPOSED  
RIGHT OF WAY AND LIMITED  
ACCESS LINES.

(00.00')  
-00.00' FIGURES IN PARENTHESES AND  
DASH-DOT-DOT LINES DENOTE  
PROPOSED TEMPORARY  
CONSTRUCTION EASEMENTS.

[00.00']  
-00.00' FIGURES IN DOUBLE BRACKETS  
AND DOT-DASHED LINES DENOTE  
PERMANENT DRAINAGE EASEMENTS.

Curve 181NB\_3  
PI • 118+39.97  
DELTA • 23° 08' 54.00" (RT)  
D • 1' 00' 00"  
T • 1173.42'  
L • 2314.83'  
R • 5729.58'  
PC • 106+66.55  
PT • 129+81.38  
V • 75 MPH  
E • MATCH EXIST.



| Element | Direction | Distance | Length | Radius |
|---------|-----------|----------|--------|--------|
|         |           |          |        |        |
|         |           |          |        |        |
|         |           |          |        |        |
|         |           |          |        |        |

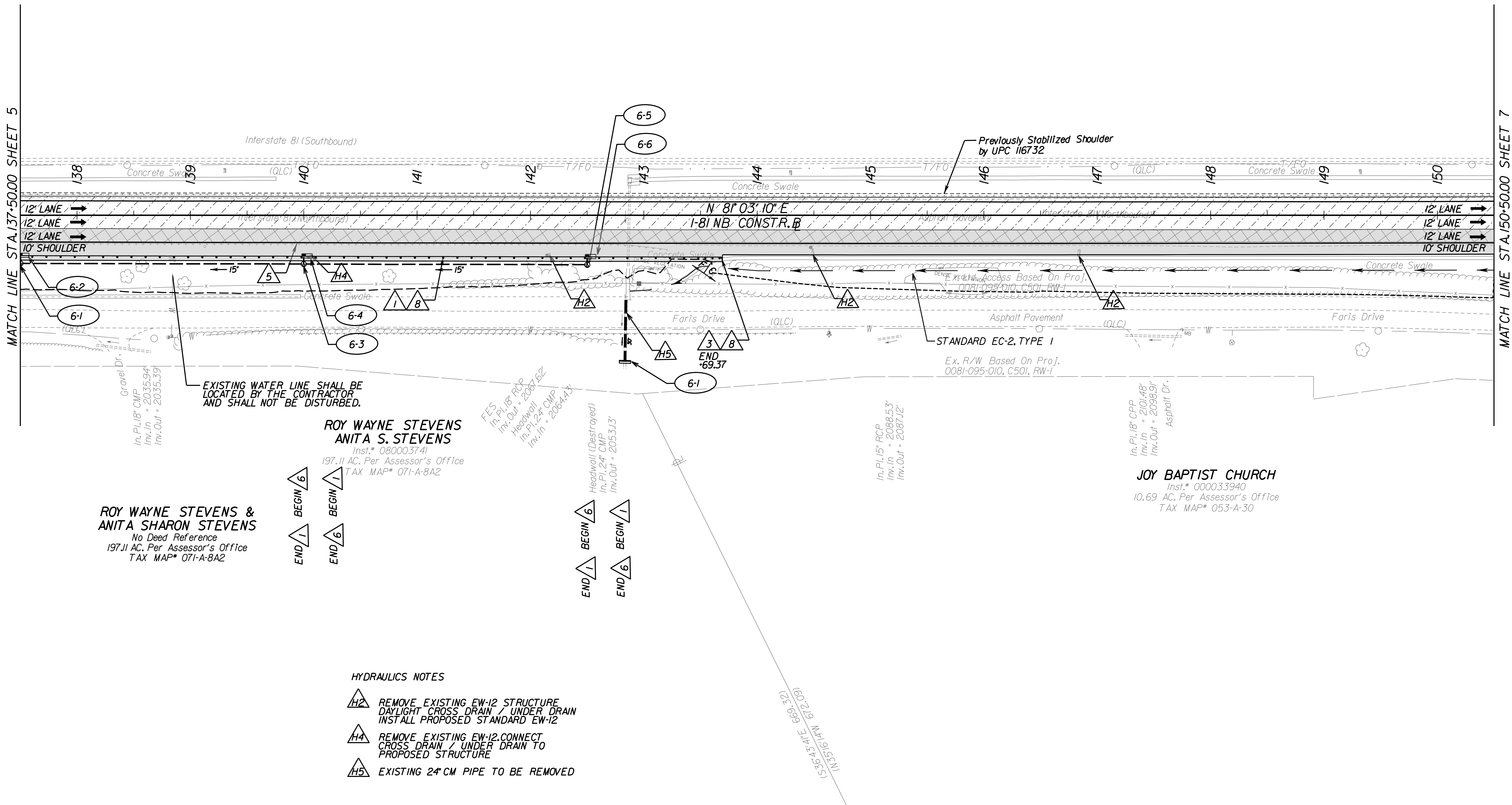
| APPROXIMATE AREA TABLE |          |               |                         |                             |
|------------------------|----------|---------------|-------------------------|-----------------------------|
| PARCEL #               | R/W TAKE | FEE REMAINDER | PERM. DRAINAGE EASEMENT | TEMP. CONSTRUCTION EASEMENT |
| 002                    |          | 2.31 AC       |                         | 6176 SF                     |

PROJECT MANAGER James Jones, L.S. (276) 696-3257 (Bristol)  
SURVEYED BY, DATE Woolpert Inc., (757) 549-3549 (Nov. 24, 2019)  
DESIGN BY Tamara Pritchard, P.E. (276) 696-3249 (Bristol)  
SUBSURFACE UTILITY BY, DATE

PH PLANS

THESE PLANS ARE UNFINISHED  
AND UNAPPROVED AND ARE NOT  
TO BE USED FOR ANY TYPE  
OF CONSTRUCTION OR THE  
ACQUISITION OF RIGHT OF WAY.

| REVISED  | STATE | ROUTE   | STATE PROJECT                          | SHEET NO. |
|--|-------|---|--|-----------|
|  |       |   |  |           |
|  | VA.   | 81  | 0081-095-829, PE-101;<br>RW-201, C-501 | 6         |
| DESIGN FEATURES RELATING TO CONSTRUCTION<br>OR TO REGULATION AND CONTROL OF TRAFFIC<br>MAY BE SUBJECT TO CHANGE AS DEEMED<br>NECESSARY BY THE DEPARTMENT |       |   |  |           |
| VDOT Location & Design<br>Bristol, Virginia<br>HYDRAULIC ENGINEER  |       | VDOT Location & Design<br>Bristol, Virginia<br>ROADWAY ENGINEER |  |           |



ROADWAY ITEMS LEGEND

- 1 ST'D.GR-MGS1 REQ'D.
- 2 ST'D.GR-MGS2 REQ'D.
- 3 ST'D.GR-MGS3 REQ'D.
- 4 ST'D.GR-MGS4 REQ'D.
- 5 REMOVE EXISTING GUARDRAIL
- 6 ST'D.GR-10 TYPE II REQ'D.
- 7 ST'D.GR-MGS1, LONG POST REQ'D.
- 8 ST'D.MC-3B, ASPHALT CURB AND ASPHALT CONCRETE CURB BACKUP MATERIAL REQ'D.
- 9 ST'D.UD-4 UNDERDRAIN REQ'D.
- 10 ST'D.UNDERDRAIN INSPECTION PORT REQ'D.
- C CONSTRUCTION LIMITS IN CUTS
- E CONSTRUCTION LIMITS IN FILLS
- XXX PARCEL NUMBER
- X-X DRAINAGE STRUCTURE
- PROPOSED PAVEMENT
- PROPOSED FLEXIBLE PAVEMENT PLANING/OVERLAY
- DEMOLITION OF PAVEMENT
- DENOTES GRADED "V" DITCH

REFERENCES  
(PROFILES, DETAIL & DRAINAGE  
DESCRIPTION SHEETS, ETC.)

Alignment Data IG  
Typical Section 2A(1)  
Profile I-81 NB 6A  
E & S 6B, 6C

HYDRAULICS NOTES

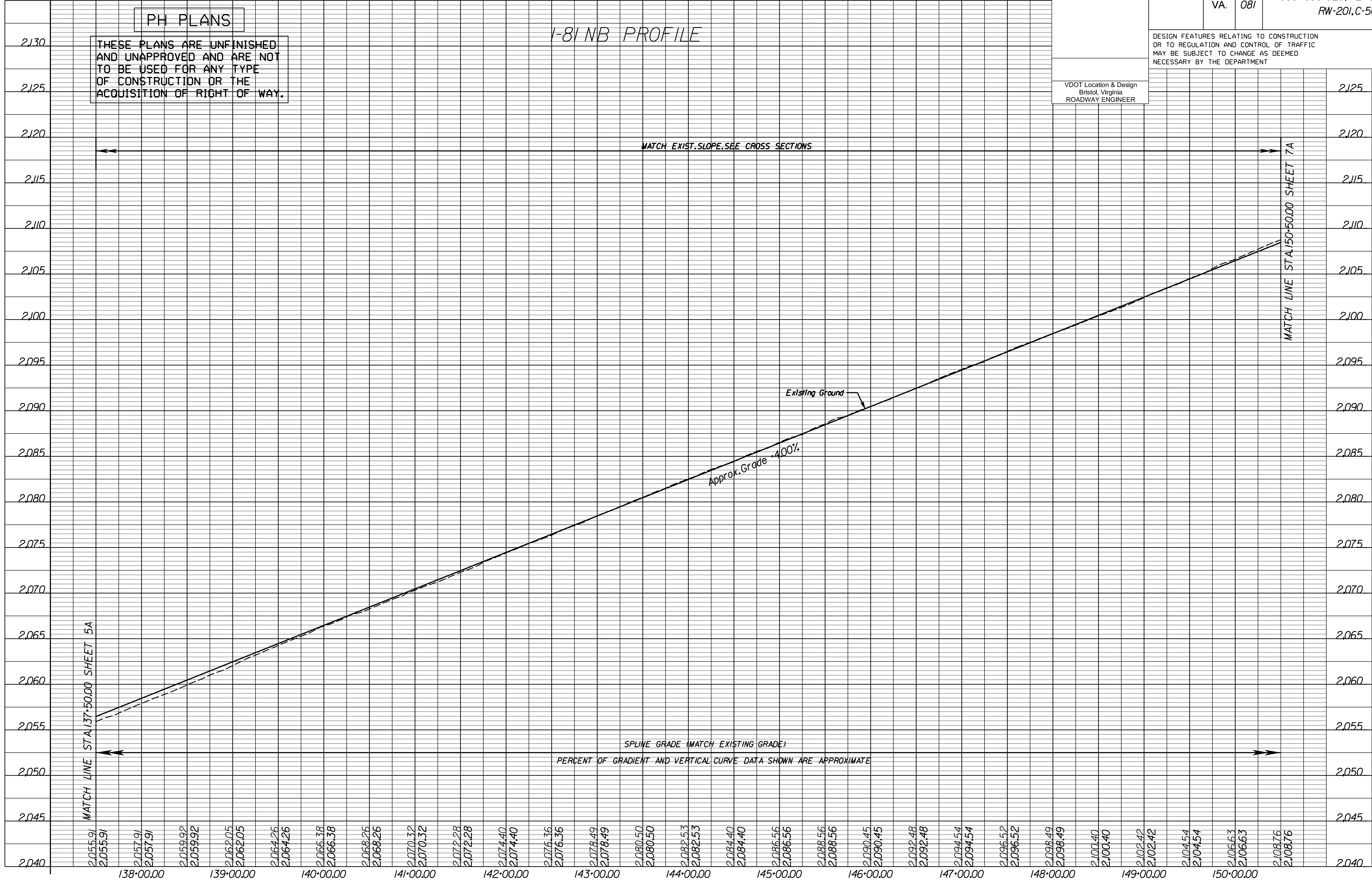
- H2 REMOVE EXISTING EW-12 STRUCTURE DAYLIGHT CROSS DRAIN / UNDER DRAIN INSTALL PROPOSED STANDARD EW-12
- H4 REMOVE EXISTING EW-12 CONNECT CROSS DRAIN / UNDER DRAIN TO PROPOSED STRUCTURE
- H5 EXISTING 24" CM PIPE TO BE REMOVED

PROJECT MANAGER James Jones, L.S., (276) 696-3257 (Bristol)  
SURVEYED BY, DATE Woolpert Inc., (757) 549-3549 (Nov. 24, 2019)  
DESIGN BY Tamara Pritchard, P.E., (276) 696-3249 (Bristol)  
SUBSURFACE UTILITY BY, DATE

| REVISED | STATE |       | STATE                                  |  | SHEET NO. |
|---------|-------|-------|--|--|-----------|
|         |       | ROUTE | PROJECT                                |  |           |
|         | VA.   | 081   | 0081-095-829, PE-101;<br>RW-201, C-501 |  | 6A        |

DESIGN FEATURES RELATING TO CONSTRUCTION OR TO REGULATION AND CONTROL OF TRAFFIC MAY BE SUBJECT TO CHANGE AS DEEMED NECESSARY BY THE DEPARTMENT

VDOT Location & Design  
Bristol, Virginia  
ROADWAY ENGINEER





PROJECT MANAGER James Jones, L.S. (276) 696-3257 (Bristol)  
SURVEYED BY, DATE Woolpert Inc., (757) 549-3549 (Nov. 24, 2019)  
DESIGN BY Tamara Pritchard, P.E. (276) 696-3249 (Bristol)  
SUBSURFACE UTILITY BY, DATE Woolpert Inc., (757) 549-3549 (Nov. 24, 2019)

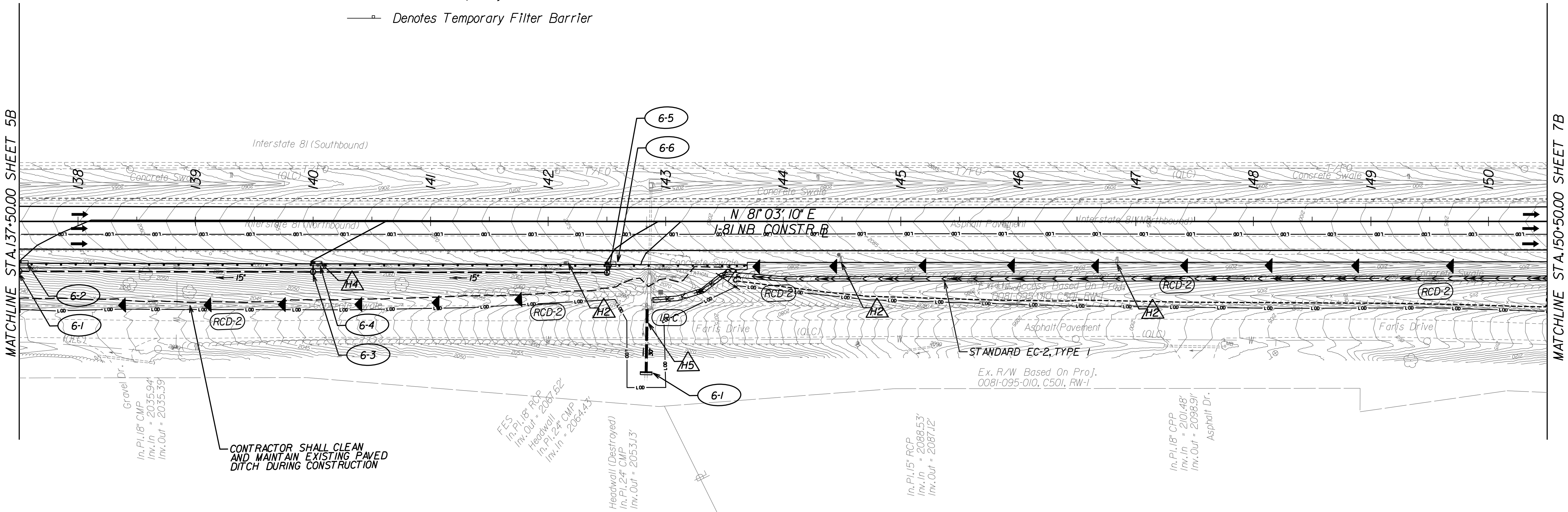
# EROSION & SEDIMENT CONTROL PLAN PHASE I

## PH PLANS

THESE PLANS ARE UNFINISHED  
AND UNAPPROVED AND ARE NOT  
TO BE USED FOR ANY TYPE  
OF CONSTRUCTION OR THE  
ACQUISITION OF RIGHT OF WAY.

### HYDRAULICS LEGEND

- 3A Denotes Drainage Information
- Denotes Permanent Rock Check Dams, Ty. I
- Denotes Temporary Rock Check Dams, Ty. II
- 3-3 Denotes Drainage Structure
- Denotes Temporary Silt Fence
- Denotes Temporary Filter Barrier



### ROADWAY ITEMS LEGEND

- C CONSTRUCTION LIMITS IN CUTS
- F CONSTRUCTION LIMITS IN FILLS
- PROPOSED PAVEMENT
- PROPOSED FLEXIBLE PAVEMENT PLANING/OVERLAY
- DEMOLITION OF PAVEMENT

### REFERENCES (PROFILES, DETAIL & DRAINAGE DESCRIPTION SHEETS, ETC.)

ROADWAY PLANS 06  
PROFILE I-81 06A  
ESC LEGEND 2

### EROSION CONTROL NARRATIVE - PHASE I

- IMMEDIATELY BEGIN GRADING OPERATION AFTER REMOVING GRASS AND TOPSOIL.
- ALL DISTURBED AREAS SHALL DRAIN TO APPROVED EROSION AND SEDIMENT CONTROL FACILITIES AT ALL TIMES DURING LAND DISTURBING ACTIVITIES UNTIL FINAL STABILIZATION IS ACHIEVED. ALL EROSION AND SEDIMENT CONTROL FACILITIES SHALL BE CONSTRUCTED AS A FIRST STEP IN ALL LAND DISTURBING ACTIVITIES AND SHALL BE MADE FUNCTIONAL BEFORE UPSLOPE LAND DISTURBANCE TAKES PLACE.
- INSTALL ROCK CHECK DAMS IN THE EXISTING DITCH LINE AND SILT FENCE ALONG THE TOE OF FILLS AS GRADING OPERATION PROCEEDS UPSTATION.
- DOWNSIDE CONVEYANCES SHOULD BE PLACED AND STABILIZED BEFORE ANY TEMPORARY DIVERSIONS ARE CONSTRUCTED.
- THE CONTRACTOR SHALL INSPECT ALL EROSION AND SEDIMENT CONTROL FACILITIES PERIODICALLY AND AFTER EACH RUNOFF-PRODUCING RAINFALL EVENT. ANY NECESSARY REPAIRS OR CLEANUP TO MAINTAIN THE EFFECTIVENESS OF THE EROSION AND SEDIMENT CONTROL FACILITIES SHALL BE MADE IMMEDIATELY. RECORDS OF ALL INSPECTIONS AND REPAIRS MADE TO EROSION AND SEDIMENT CONTROL FACILITIES SHALL BE MAINTAINED BY THE CONTRACTOR.

### NOTES:

- R/W BASED ON CONSTRUCTION BASELINE UNLESS OTHERWISE NOTED.
- FIGURES IN DOUBLE BRACKETS AND DOT-DASHED LINES DENOTES PERMANENT EASEMENTS.
- REFERENCE PLAN SHEET 02 (GENERAL NOTES) FOR EROSION AND SEDIMENT CONTROL LEGEND.

### SUGGESTED EROSION AND SEDIMENT CONTROL PLANS - PHASE I

| SCALE      | PROJECT      | SHEET NO. |
|------------|--------------|-----------|
| 0 50' 100' | 0081-095-829 | 6B        |

PROJECT MANAGER James Jones, L.S., (276) 696-3257, (Bristol)  
SURVEYED BY, DATE Woolpert Inc., (757) 549-3549 (Nov. 24, 2019)  
DESIGN BY Tamara Pritchard, P.E., (276) 696-3249 (Bristol)  
SUBSURFACE UTILITY BY, DATE Woolpert Inc., (757) 549-3549 (Nov. 24, 2019)

# EROSION & SEDIMENT CONTROL PLAN PHASE II

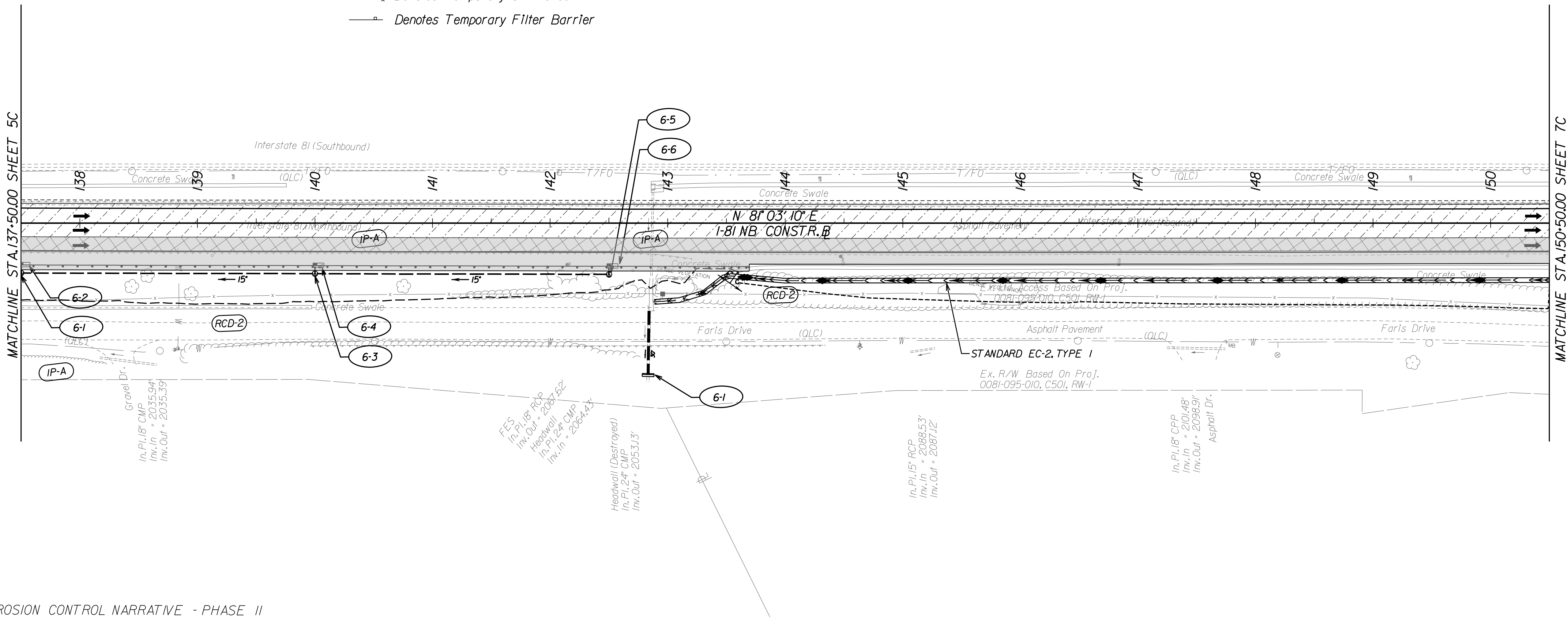
## PH PLANS

THESE PLANS ARE UNFINISHED  
AND UNAPPROVED AND ARE NOT  
TO BE USED FOR ANY TYPE  
OF CONSTRUCTION OR THE  
ACQUISITION OF RIGHT OF WAY.

### HYDRAULICS LEGEND

- Denotes Drainage Information
- Denotes Permanent Rock Check Dams, Ty. I
- Denotes Temporary Rock Check Dams, Ty. II
- Denotes Drainage Structure
- Denotes Temporary Silt Fence
- Denotes Temporary Filter Barrier

|   |         |       |       |                               |           |
|---|---------|-------|-------|-------------------------------|-----------|
| LIMITED ACCESS HIGHWAY  | REVISED | STATE | ROUTE | STATE PROJECT                 | SHEET NO. |
|   |         | VA.   | 81    | 0081-095-829, RW-201<br>C-501 | 6C        |
| DESIGN FEATURES RELATING TO CONSTRUCTION OR TO REGULATION AND CONTROL OF TRAFFIC MAY BE SUBJECT TO CHANGE AS DEEMED NECESSARY BY THE DEPARTMENT |         |       |       |                               |           |
| VDOT Location & Design<br>Bristol, Virginia<br>HYDRAULIC ENGINEER   |         |       |       |                               |           |



### EROSION CONTROL NARRATIVE - PHASE II

- ALL DISTURBED AREAS SHALL DRAIN TO APPROVED EROSION AND SEDIMENT CONTROL FACILITIES AT ALL TIMES DURING LAND DISTURBING ACTIVITIES UNTIL FINAL STABILIZATION IS ACHIEVED. ALL EROSION AND SEDIMENT CONTROL FACILITIES SHALL BE CONSTRUCTED AS A FIRST STEP IN ALL LAND DISTURBING ACTIVITIES AND SHALL BE MADE FUNCTIONAL BEFORE UPSLOPE LAND DISTURBANCE TAKES PLACE.
- INSTALL ROCK CHECK DAMS IN THE EXISTING DITCH LINE AND SILT FENCE ALONG THE TOE OF FILLS AS GRADING OPERATION PROCEEDS UPSTATION.
- DOWNSTEAM CONVEYANCES SHOULD BE PLACE AND STABILIZED BEFORE ANY TEMPORARY DIVERSIONS ARE CONSTRUCTED.
- THE CONTRACTOR SHALL INSPECT ALL EROSION AND SEDIMENT CONTROL FACILITIES PERIODICALLY AND AFTER EACH RUNOFF-PRODUCING RAINFALL EVENT. ANY NECESSARY REPAIRS OR CLEANUP TO MAINTAIN THE EFFECTIVENESS OF THE EROSION AND SEDIMENT CONTROL FACILITIES SHALL BE MADE IMMEDIATELY. RECORDS OF ALL INSPECTIONS AND REPAIRS MADE TO EROSION AND SEDIMENT CONTROL FACILITIES SHALL BE MAINTAINED BY THE CONTRACTOR.

### NOTES:

- R/WY BASED ON CONSTRUCTION BASELINE UNLESS OTHERWISE NOTED.
- FIGURES IN DOUBLE BRACKETS AND DOT-DASHED LINES DENOTES PERMANENT EASEMENTS.
- REFERENCE PLAN SHEET 02 (GENERAL NOTES) FOR EROSION AND SEDIMENT CONTROL LEGEND.

### ROADWAY ITEMS LEGEND

- CONSTRUCTION LIMITS IN CUTS
- CONSTRUCTION LIMITS IN FILLS
- PROPOSED PAVEMENT
- PROPOSED FLEXIBLE PAVEMENT PLANING/OVERLAY
- DEMOLITION OF PAVEMENT

### REFERENCES (PROFILES, DETAIL & DRAINAGE DESCRIPTION SHEETS, ETC.)

|               |     |
|---------------|-----|
| ROADWAY PLANS | 06  |
| PROFILE I-81  | 06A |
| ESC LEGEND    | 2   |

### SUGGESTED EROSION AND SEDIMENT CONTROL PLANS - PHASE II

|                     |                         |                 |
|---------------------|-------------------------|-----------------|
| SCALE<br>0 50' 100' | PROJECT<br>0081-095-829 | SHEET NO.<br>6C |
|---------------------|-------------------------|-----------------|

PROJECT MANAGER James Jones, L.S., (276) 696-3257 (Bristol)  
SURVEYED BY, DATE Woolpert Inc., (757) 549-3549 (Nov. 24, 2019)  
DESIGN BY Tamara Pritchard, P.E., (276) 696-3249 (Bristol)  
SUBSURFACE UTILITY BY, DATE Woolpert Inc., (757) 549-3549 (Nov. 24, 2019)

PH PLANS

THESE PLANS ARE UNFINISHED  
AND UNAPPROVED AND ARE NOT  
TO BE USED FOR ANY TYPE  
OF CONSTRUCTION OR THE  
ACQUISITION OF RIGHT OF WAY.

NOTES:

THIS RIGHT OF WAY SHEET REPRESENTS A FIELD  
RUN PERIMETER SURVEY OF THE PROPOSED R/W  
LIMITS. ALL OTHER ADJOINING/DEPARTING BOUNDARY  
LINES SHOWN ARE COMPILED FROM VARIOUS SOURCES:  
FOUND FIELD MONUMENTATION, METES AND BOUNDS  
DESCRIPTIONS, AND RECORDED PLATS. THE ADJOINING  
LINES DO NOT REPRESENT A FIELD RUN SURVEY OF  
THE ADJOINING PROPERTIES AND ARE BEST FIT  
BASED ON COMPILED DATA. ALL AREAS SHOWN FOR R/W  
TAKES AND EASEMENTS ARE APPROXIMATE ONLY.


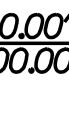


THIS SURVEY DATUM IS BASED ON VDOT  
PROJECT 0081-095-829, RW201, C501 UPC:116156

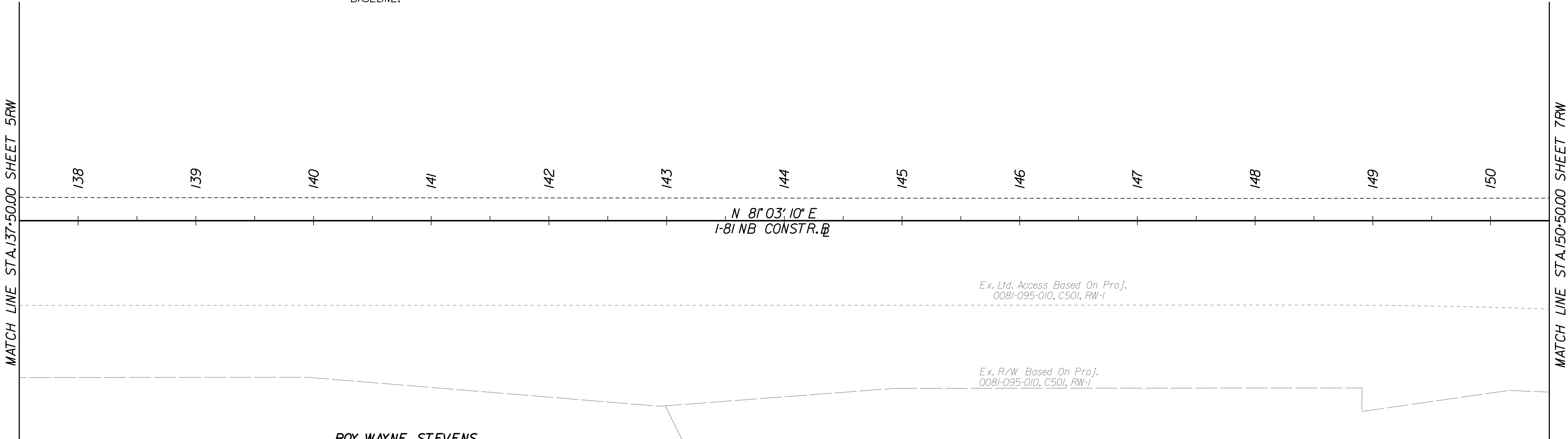
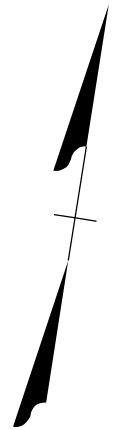
RIGHT OF WAY MONUMENTATION TO BE SET UPON  
COMPLETION OF CONSTRUCTION.

NO CEMETERY SITES WERE OBSERVED OF THE SUBJECT  
PROPERTY. THIS DOES NOT PRECLUDE THEIR EXISTENCE.

ALL PROPOSED RIGHT-OF-WAY MONUMENTATION OFFSET/  
STATIONS AND PROPOSED EASEMENT OFFSET/STATIONS  
SHOWN HEREON ARE BASED OFF OF THE I-81 NB  
BASELINE.

LEGEND

-  PROPOSED R/W MONUMENT
-  FIGURES AND CONTINUOUS  
LINES DENOTE PROPOSED  
RIGHT OF WAY AND LIMITED  
ACCESS LINES.
-  FIGURES IN PARENTHESES AND  
DASH-DOT-DOT LINES DENOTE  
PROPOSED TEMPORARY  
CONSTRUCTION EASEMENTS.
-  FIGURES IN DOUBLE BRACKETS  
AND DOT-DASHED LINES DENOTE  
PERMANENT DRAINAGE EASEMENTS.



**ROY WAYNE STEVENS**  
**ANITA S. STEVENS**  
Inst.\* 080003741  
197.11 AC, Per Assessor's Office  
TAX MAP\* 071-A-8A2

**JOY BAPTIST CHURCH**  
Inst.\* 000033940  
10.69 AC, Per Assessor's Office  
TAX MAP\* 053-A-30

| Element | Direction | Distance | Length | Radius |
|---------|-----------|----------|--------|--------|
|         |           |          |        |        |
|         |           |          |        |        |

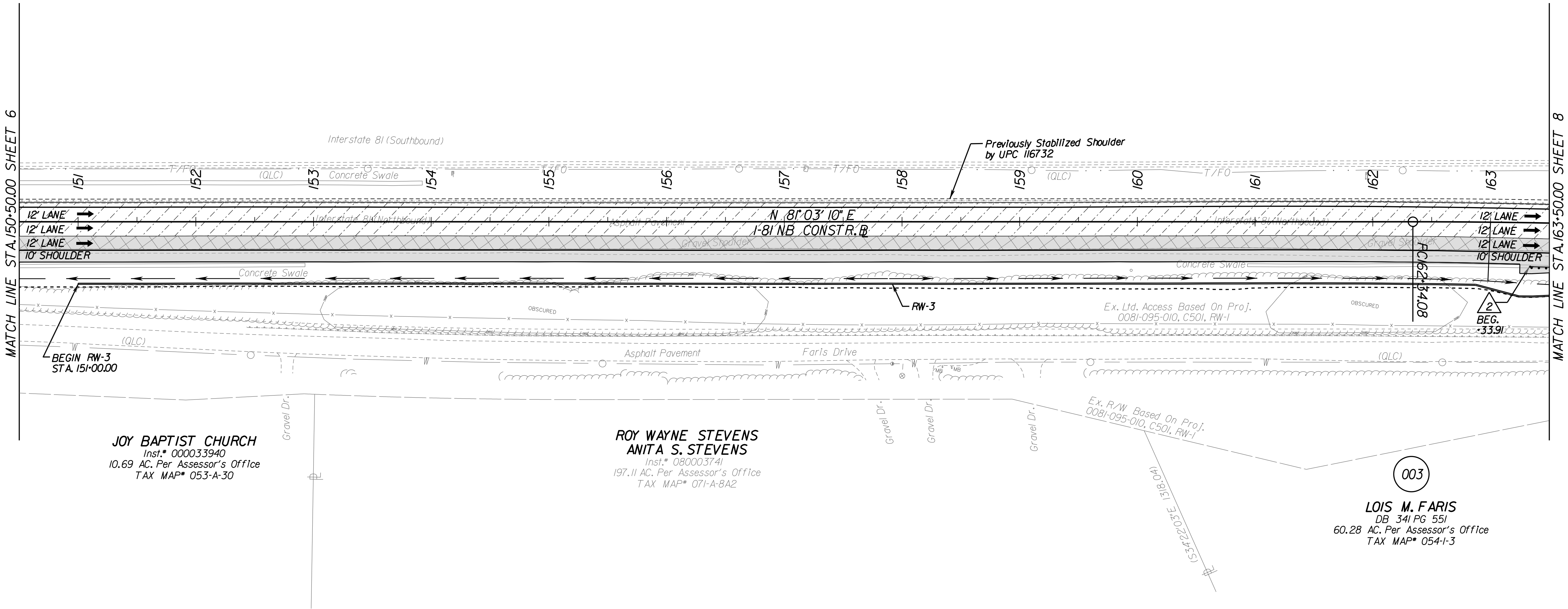
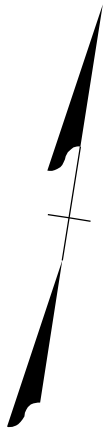
| APPROXIMATE AREA TABLE |          |               |                         |                             |
|------------------------|----------|---------------|-------------------------|-----------------------------|
| PARCEL *               | R/W TAKE | FEE REMAINDER | PERM. DRAINAGE EASEMENT | TEMP. CONSTRUCTION EASEMENT |
|                        |          |               |                         |                             |



PROJECT MANAGER James Jones, L.S., (276) 696-3257 (Bristol)  
SURVEYED BY, DATE Woolpert Inc., (757) 549-3549 (Nov. 24, 2019)  
DESIGN BY Tamara Pritchard, P.E., (276) 696-3249 (Bristol)  
SUBSURFACE UTILITY BY, DATE

PH PLANS

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AND UNAPPROVED AND ARE NOT  
TO BE USED FOR ANY TYPE  
OF CONSTRUCTION OR THE  
ACQUISITION OF RIGHT OF WAY.



- ROADWAY ITEMS LEGEND**
- 1 ST'D.GR-MGS1 REQ'D.
  - 2 ST'D.GR-MGS2 REQ'D.
  - 3 ST'D.GR-MGS3 REQ'D.
  - 4 ST'D.GR-MGS4 REQ'D.
  - 5 REMOVE EXISTING GUARDRAIL
  - 6 ST'D.GR-10 TYPE II REQ'D.
  - 7 ST'D.GR-MGS1, LONG POST REQ'D.
  - 8 ST'D.MC-3B, ASPHALT CURB AND ASPHALT CONCRETE CURB BACKUP MATERIAL REQ'D.
  - 9 ST'D.UD-4 UNDERDRAIN REQ'D.
  - 10 ST'D.Underdrain Inspection Port REQ'D.
  - C CONSTRUCTION LIMITS IN CUTS
  - F CONSTRUCTION LIMITS IN FILLS
  - XXX PARCEL NUMBER
  - (X-X) DRAINAGE STRUCTURE
  - PROPOSED PAVEMENT
  - PROPOSED FLEXIBLE PAVEMENT PLANING/OVERLAY
  - DEMOLITION OF PAVEMENT
  - DENOTES GRADED "V" DITCH

REFERENCES  
(PROFILES, DETAIL & DRAINAGE  
DESCRIPTION SHEETS, ETC.)

Alignment Data IG  
Typical Section 2A(1)  
Profile I-81 NB 7A  
E & S 7B, 7C

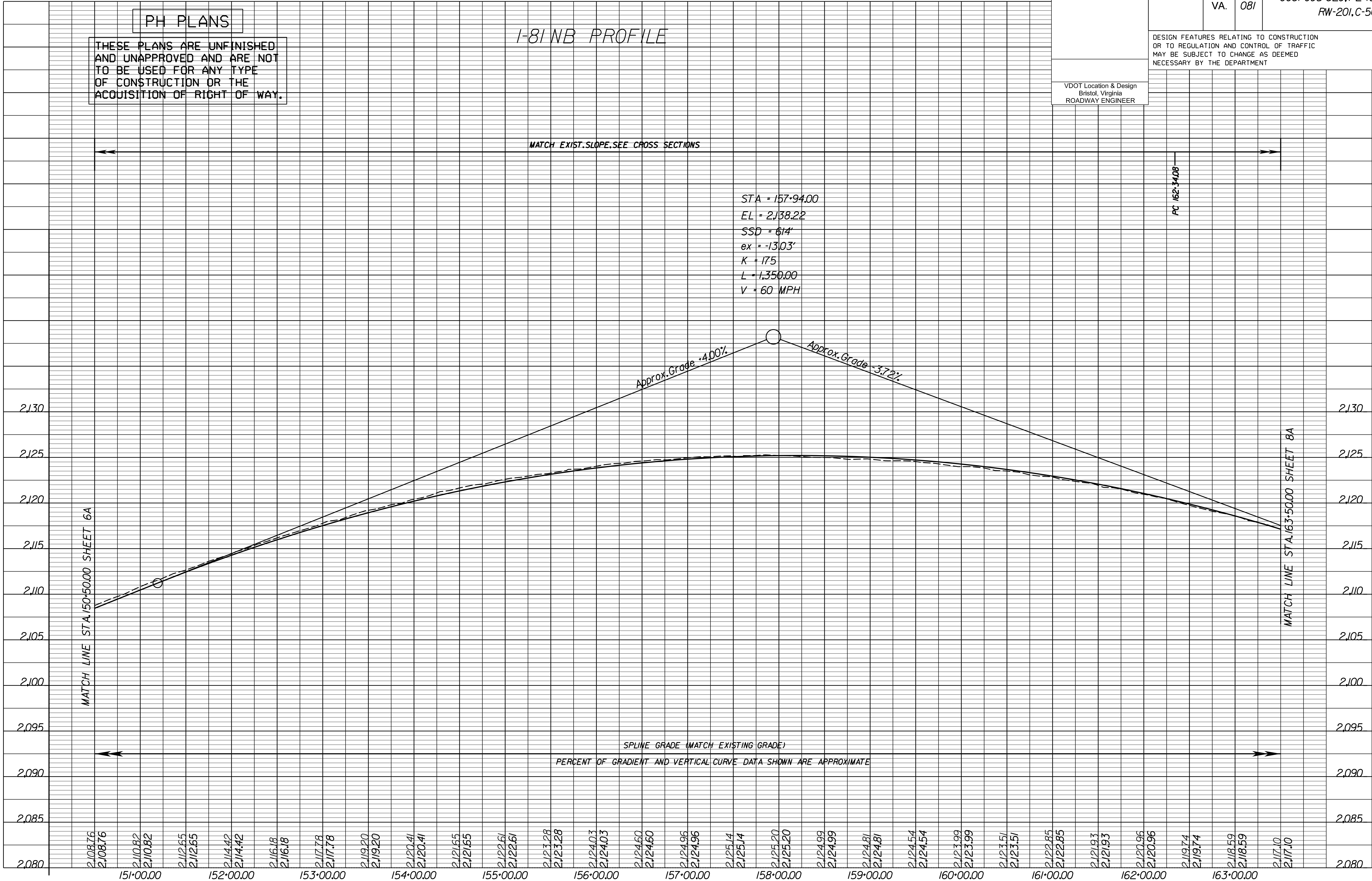


PROJECT MANAGER: James Jones, L.S., (276) 696-3257 (Bristol)  
SURVEYED BY, DATE: Woolpert Inc., (757) 549-3549 (Nov. 24, 2019)  
DESIGN BY: Tamara Pritchard, P.E., (276) 696-3249 (Bristol)  
SUBSURFACE UTILITY BY, DATE:

| REVISED | STATE | ROUTE | STATE PROJECT                          | SHEET NO. |
|---------|-------|-------|--|-----------|
|         | VA.   | 081   | 0081-095-829, PE-101,<br>RW-201, C-501 | 7A        |

DESIGN FEATURES RELATING TO CONSTRUCTION  
OR TO REGULATION AND CONTROL OF TRAFFIC  
MAY BE SUBJECT TO CHANGE AS DEEMED  
NECESSARY BY THE DEPARTMENT

VDOT Location & Design  
Bristol, Virginia  
ROADWAY ENGINEER



PROJECT MANAGER James Jones, L.S., (276) 696-3257 (Bristol)  
SURVEYED BY, DATE Woolpert Inc., (757) 549-3549 (Nov. 24, 2019)  
DESIGN BY Tamara Pritchard, P.E., (276) 696-3249 (Bristol)  
SUBSURFACE UTILITY BY, DATE Woolpert Inc., (757) 549-3549 (Nov. 24, 2019)

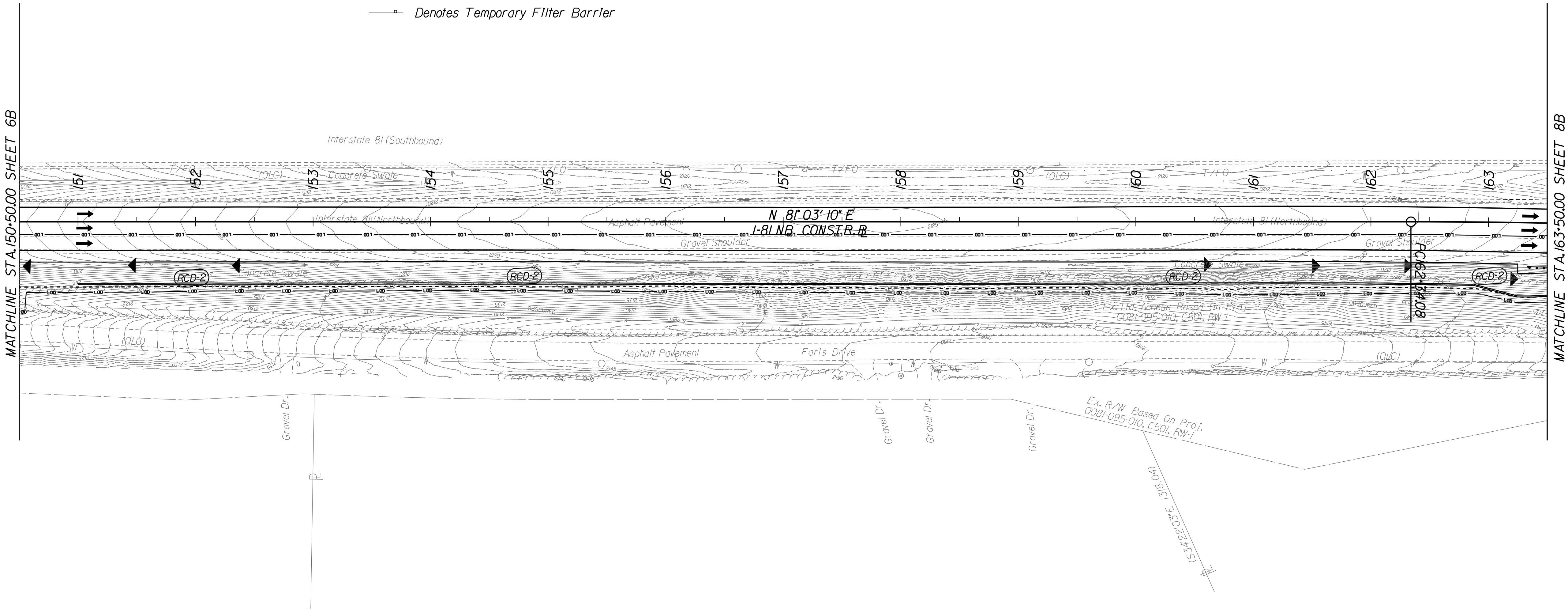
# EROSION & SEDIMENT CONTROL PLAN PHASE I

## PH PLANS

THESE PLANS ARE UNFINISHED  
AND UNAPPROVED AND ARE NOT  
TO BE USED FOR ANY TYPE  
OF CONSTRUCTION OR THE  
ACQUISITION OF RIGHT OF WAY.

### HYDRAULICS LEGEND

- 3A Denotes Drainage Information  
Denotes Permanent Rock Check Dams, Ty.I  
Denotes Temporary Rock Check Dams, Ty.II  
3-3 Denotes Drainage Structure  
Denotes Temporary Silt Fence  
Denotes Temporary Filter Barrier



### EROSION CONTROL NARRATIVE - PHASE I

- IMMEDIATELY BEGIN GRADING OPERATION AFTER REMOVING GRASS AND TOPSOIL.
- ALL DISTURBED AREAS SHALL DRAIN TO APPROVED EROSION AND SEDIMENT CONTROL FACILITIES AT ALL TIMES DURING LAND DISTURBING ACTIVITIES UNTIL FINAL STABILIZATION IS ACHIEVED. ALL EROSION AND SEDIMENT CONTROL FACILITIES SHALL BE CONSTRUCTED AS A FIRST STEP IN ALL LAND DISTURBING ACTIVITIES AND SHALL BE MADE FUNCTIONAL BEFORE UPSLOPE LAND DISTURBANCE TAKES PLACE.
- INSTALL ROCK CHECK DAMS IN THE EXISTING DITCH LINE AND SILT FENCE ALONG THE TOE OF FILLS AS GRADING OPERATION PROCEEDS UPSTATION.
- DOWNSTEAM CONVEYANCES SHOULD BE PLACE AND STABILIZED BEFORE ANY TEMPORARY DIVERSIONS ARE CONSTRUCTED.
- THE CONTRACTOR SHALL INSPECT ALL EROSION AND SEDIMENT CONTROL FACILITIES PERIODICALLY AND AFTER EACH RUNOFF-PRODUCING RAINFALL EVENT. ANY NECESSARY REPAIRS OR CLEANUP TO MAINTAIN THE EFFECTIVENESS OF THE EROSION AND SEDIMENT CONTROL FACILITIES SHALL BE MADE IMMEDIATELY. RECORDS OF ALL INSPECTIONS AND REPAIRS MADE TO EROSION AND SEDIMENT CONTROL FACILITIES SHALL BE MAINTAINED BY THE CONTRACTOR.

### NOTES:

- R/W BASED ON CONSTRUCTION BASELINE UNLESS OTHERWISE NOTED.
- FIGURES IN DOUBLE BRACKETS AND DOT-DASHED LINES DENOTES PERMANENT EASEMENTS.
- REFERENCE PLAN SHEET 02 (GENERAL NOTES) FOR EROSION AND SEDIMENT CONTROL LEGEND.

### ROADWAY ITEMS LEGEND

- C CONSTRUCTION LIMITS IN CUTS  
F CONSTRUCTION LIMITS IN FILLS  
PROPOSED PAVEMENT  
PROPOSED FLEXIBLE PAVEMENT PLANING/OVERLAY  
DEMOLITION OF PAVEMENT

### REFERENCES (PROFILES, DETAIL & DRAINAGE DESCRIPTION SHEETS, ETC.)

|               |     |
|---------------|-----|
| ROADWAY PLANS | 07  |
| PROFILES I-81 | 07A |
| ESC LEGEND    | 2   |

### SUGGESTED EROSION AND SEDIMENT CONTROL PLANS - PHASE I

| SCALE      | PROJECT      | SHEET NO. |
|------------|--------------|-----------|
| 0 50' 100' | 0081-095-829 | 7B        |

PROJECT MANAGER James Jones, L.S., (276) 696-3257 (Bristol)  
SURVEYED BY, DATE Woolpert Inc., (757) 549-3549 (Nov. 24, 2019)  
DESIGN BY Tamara Pritchard, P.E., (276) 696-3249 (Bristol)  
SUBSURFACE UTILITY BY, DATE Woolpert Inc., (757) 549-3549 (Nov. 24, 2019)

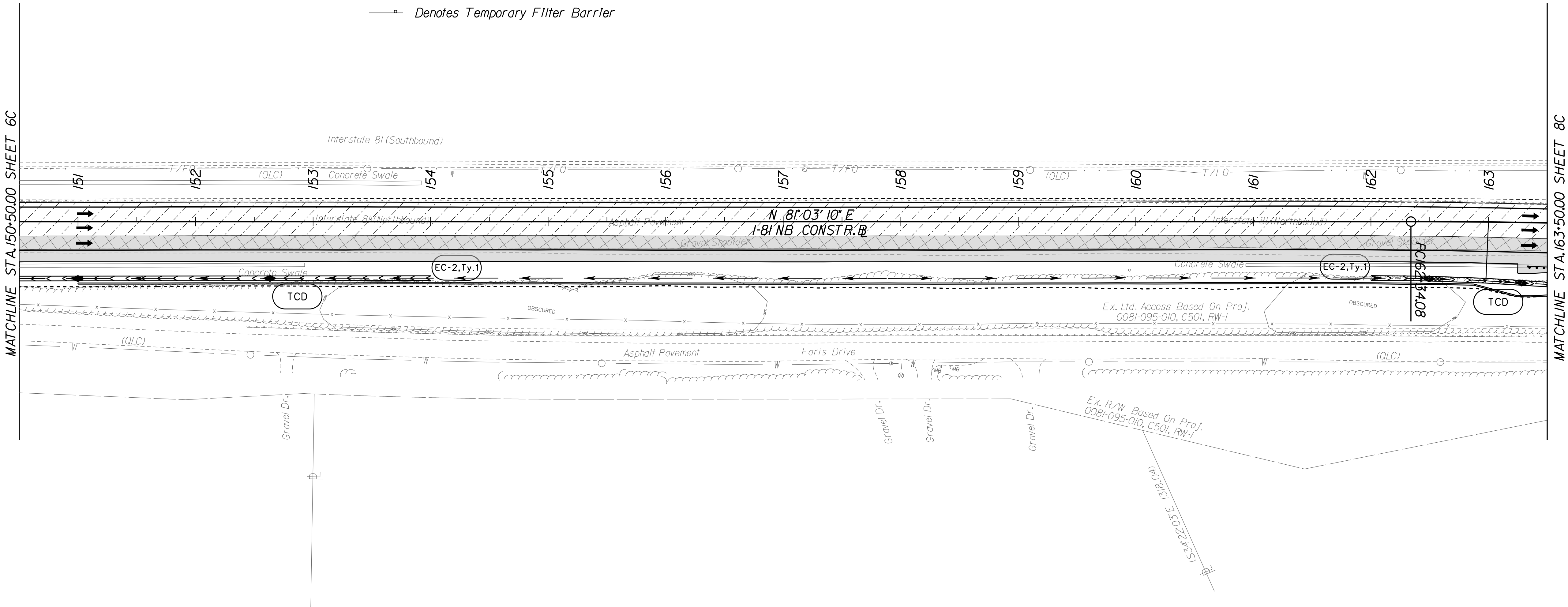
# EROSION & SEDIMENT CONTROL PLAN PHASE II

## PH PLANS

THESE PLANS ARE UNFINISHED  
AND UNAPPROVED AND ARE NOT  
TO BE USED FOR ANY TYPE  
OF CONSTRUCTION OR THE  
ACQUISITION OF RIGHT OF WAY.

### HYDRAULICS LEGEND

- 3A Denotes Drainage Information
- Denotes Permanent Rock Check Dams, Ty. I
- Denotes Temporary Rock Check Dams, Ty. II
- 3-3 Denotes Drainage Structure
- Denotes Temporary Silt Fence
- Denotes Temporary Filter Barrier



### ROADWAY ITEMS LEGEND

- C CONSTRUCTION LIMITS IN CUTS
- F CONSTRUCTION LIMITS IN FILLS
- PROPOSED PAVEMENT
- PROPOSED FLEXIBLE PAVEMENT PLANING/OVERLAY
- DEMOLITION OF PAVEMENT

### REFERENCES (PROFILES, DETAIL & DRAINAGE DESCRIPTION SHEETS, ETC.)

|               |     |
|---------------|-----|
| ROADWAY PLANS | 07  |
| PROFILES I-81 | 07A |
| ESC LEGEND    | 2   |

### EROSION CONTROL NARRATIVE - PHASE II

- ALL DISTURBED AREAS SHALL DRAIN TO APPROVED EROSION AND SEDIMENT CONTROL FACILITIES AT ALL TIMES DURING LAND DISTURBING ACTIVITIES UNTIL FINAL STABILIZATION IS ACHIEVED. ALL EROSION AND SEDIMENT CONTROL FACILITIES SHALL BE CONSTRUCTED AS A FIRST STEP IN ALL LAND DISTURBING ACTIVITIES AND SHALL BE MADE FUNCTIONAL BEFORE UPSLOPE LAND DISTURBANCE TAKES PLACE.
- INSTALL ROCK CHECK DAMS IN THE EXISTING DITCH LINE AND SILT FENCE ALONG THE TOE OF FILLS AS GRADING OPERATION PROCEEDS UPSTATION.
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### NOTES:

- R/W BASED ON CONSTRUCTION BASILINE UNLESS OTHERWISE NOTED.
- FIGURES IN DOUBLE BRACKETS AND DOT-DASHED LINES DENOTES PERMANENT EASEMENTS.
- REFERENCE PLAN SHEET 02 (GENERAL NOTES) FOR EROSION AND SEDIMENT CONTROL LEGEND.

### SUGGESTED EROSION AND SEDIMENT CONTROL PLANS - PHASE II

|                     |                         |                 |
|---------------------|-------------------------|-----------------|
| SCALE<br>0 50' 100' | PROJECT<br>008I-095-829 | SHEET NO.<br>7C |
|---------------------|-------------------------|-----------------|

PROJECT MANAGER James Jones, L.S., (276) 696-3257, (Bristol)  
SURVEYED BY, DATE Woolpert, Inc., (757) 549-3549 (Nov. 24, 2019)  
DESIGN BY Tamara Pritchard, P.E., (276) 696-3249 (Bristol)  
SUBSURFACE UTILITY BY, DATE \_\_\_\_\_

PH PLANS

THESE PLANS ARE UNFINISHED  
AND UNAPPROVED AND ARE NOT  
TO BE USED FOR ANY TYPE  
OF CONSTRUCTION OR THE  
ACQUISITION OF RIGHT OF WAY.

NOTES:

THIS RIGHT OF WAY SHEET REPRESENTS A FIELD RUN PERIMETER SURVEY OF THE PROPOSED R/W LIMITS. ALL OTHER ADJOINING/DEPARTING BOUNDARY LINES SHOWN ARE COMPILED FROM VARIOUS SOURCES: FOUND FIELD MONUMENTATION, METES AND BOUNDS DESCRIPTIONS, AND RECORDED PLATS. THE ADJOINING LINES DO NOT REPRESENT A FIELD RUN SURVEY OF THE ADJOINING PROPERTIES AND ARE BEST FIT BASED ON COMPILED DATA. ALL AREAS SHOWN FOR R/W TAKES AND EASEMENTS ARE APPROXIMATE ONLY.

THIS SURVEY DATUM IS BASED ON VDOT  
PROJECT 0081-095-829, RW201, C501 UPC:116156

RIGHT OF WAY MONUMENTATION TO BE SET UPON  
COMPLETION OF CONSTRUCTION.

NO CEMETERY SITES WERE OBSERVED OF THE SUBJECT  
PROPERTY. THIS DOES NOT PRECLUDE THEIR EXISTENCE.

ALL PROPOSED RIGHT-OF-WAY MONUMENTATION OFFSET/  
STATIONS AND PROPOSED EASEMENT OFFSET/STATIONS  
SHOWN HEREON ARE BASED OFF OF THE I-81 NB  
BASELINE.

LEGEND

○ PROPOSED R/W MONUMENT

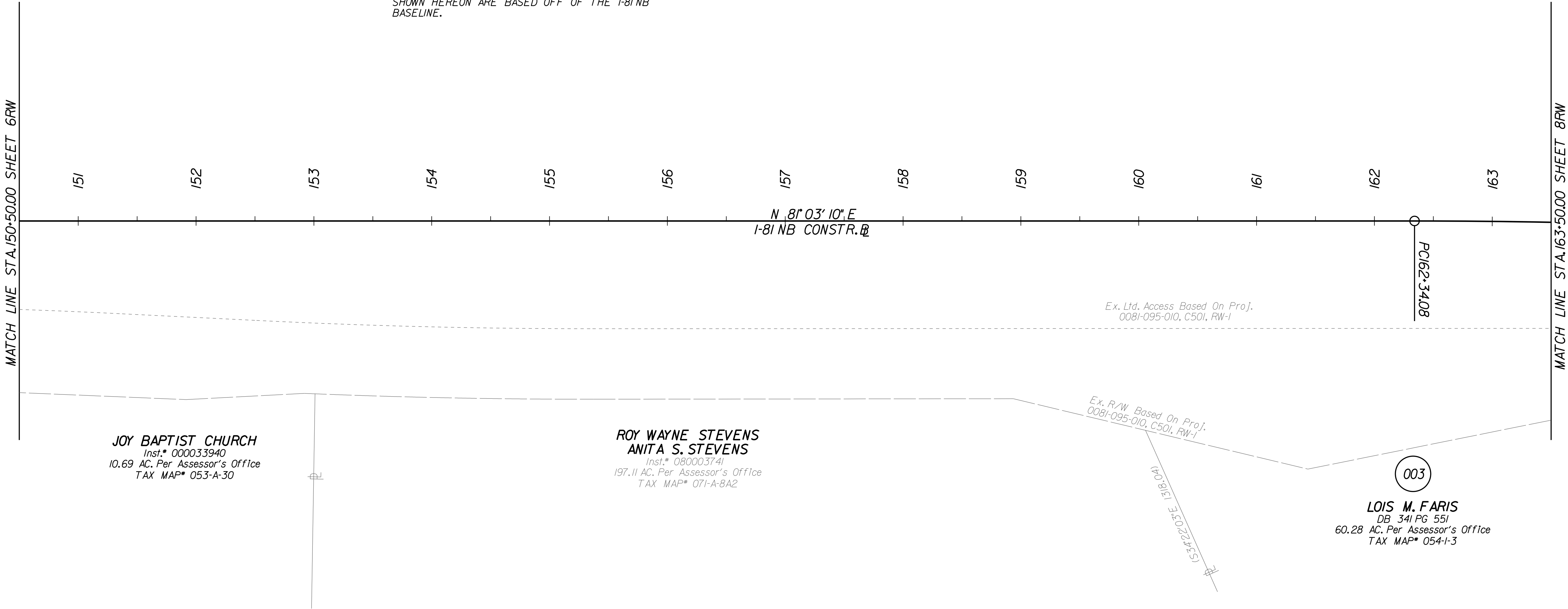
00.00'  
-00.00' FIGURES AND CONTINUOUS  
LINES DENOTE PROPOSED  
RIGHT OF WAY AND LIMITED  
ACCESS LINES.

(00.00')  
-00.00' FIGURES IN PARENTHESES AND  
DASH-DOT-DOT LINES DENOTE  
PROPOSED TEMPORARY  
CONSTRUCTION EASEMENTS.

[00.00']  
-00.00' FIGURES IN DOUBLE BRACKETS  
AND DOT-DASHED LINES DENOTE  
PERMANENT DRAINAGE EASEMENTS.



| REVISED  | STATE   | ROUTE | STATE                                  | SHEET NO. |
|--|---|-------|--|-----------|
|  |   |       | PROJECT                                |           |
|  | VA.   | 81    | 0081-095-829, PE-101;<br>RW-201, C-501 | 7RW       |
| DESIGN FEATURES RELATING TO CONSTRUCTION<br>OR TO REGULATION AND CONTROL OF TRAFFIC<br>MAY BE SUBJECT TO CHANGE AS DEEMED<br>NECESSARY BY THE DEPARTMENT |   |       |  |           |
| VDOT Location & Design<br>Bristol, Virginia<br>HYDRAULIC ENGINEER  | VDOT Location & Design<br>Bristol, Virginia<br>ROADWAY ENGINEER |       |  |           |



| Element | Direction | Distance | Length | Radius |
|---------|-----------|----------|--------|--------|
|         |           |          |        |        |
|         |           |          |        |        |
|         |           |          |        |        |

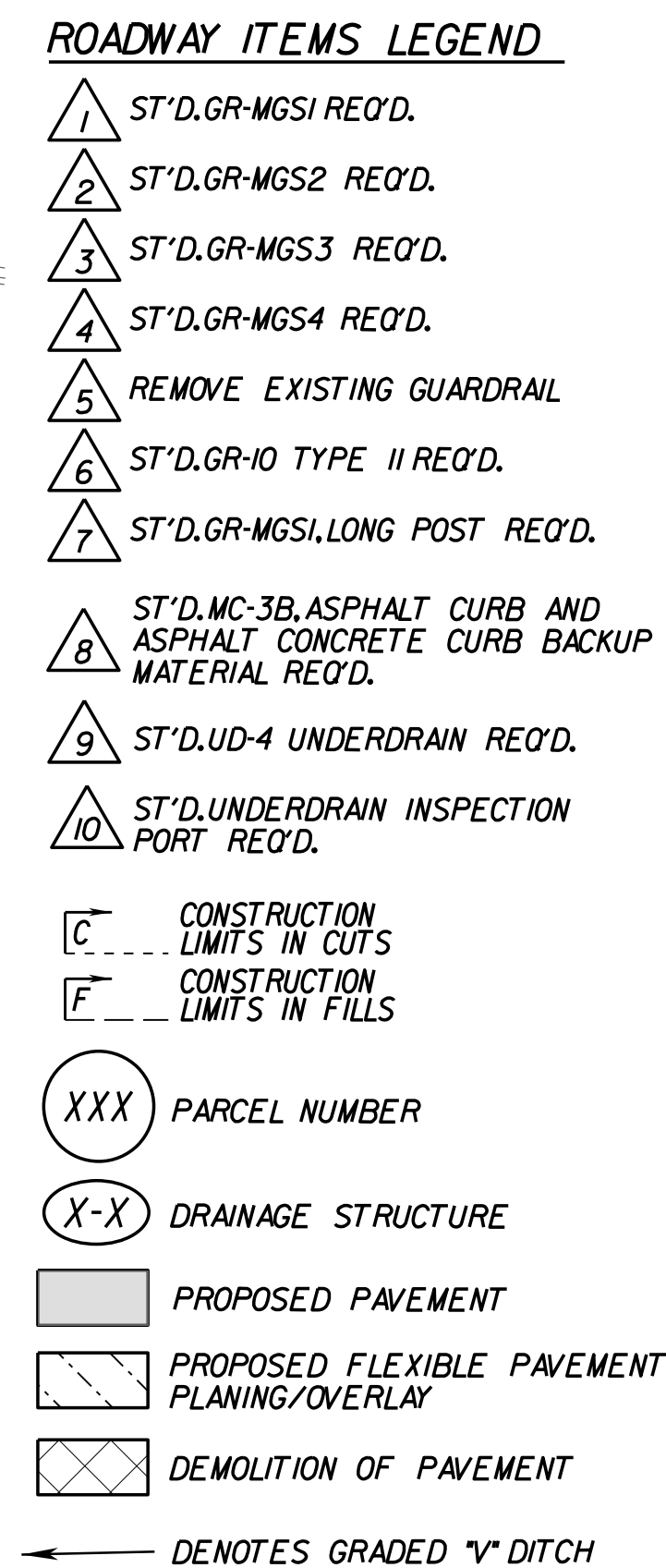
| APPROXIMATE AREA TABLE |          |               |                            |                                |
|------------------------|----------|---------------|----------------------------|--------------------------------|
| PARCEL *               | R/W TAKE | FEE REMAINDER | PERM. DRAINAGE<br>EASEMENT | TEMP. CONSTRUCTION<br>EASEMENT |
|                        |          |               |                            |                                |



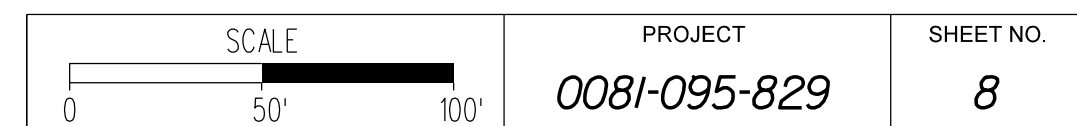
PROJECT MANAGER James Jones, L.S. (276) 696-3257 (Bristol)  
SURVEYED BY, DATE Woolpert Inc., (757) 549-3549 (Nov. 24, 2019)  
DESIGN BY Tamara Pritchard, P.E. (276) 696-3249 (Bristol)  
SUBSURFACE UTILITY BY, DATE \_\_\_\_\_

THESE PLANS ARE UNFINISHED  
AND UNAPPROVED AND ARE NOT  
TO BE USED FOR ANY TYPE  
OF CONSTRUCTION OR THE  
ACQUISITION OF RIGHT OF WAY.

Curve 181NB\_6  
PI = 175.05.48  
DELTA = 25° 01' 21.20" (RT)  
D = 1'00' 00"  
T = 1,271.40'  
L = 2,502.26'  
R = 5,729.58'  
PC = 162+34.08  
PT = 187+36.34  
V = 75 MPH  
E = MATCH EXIST.



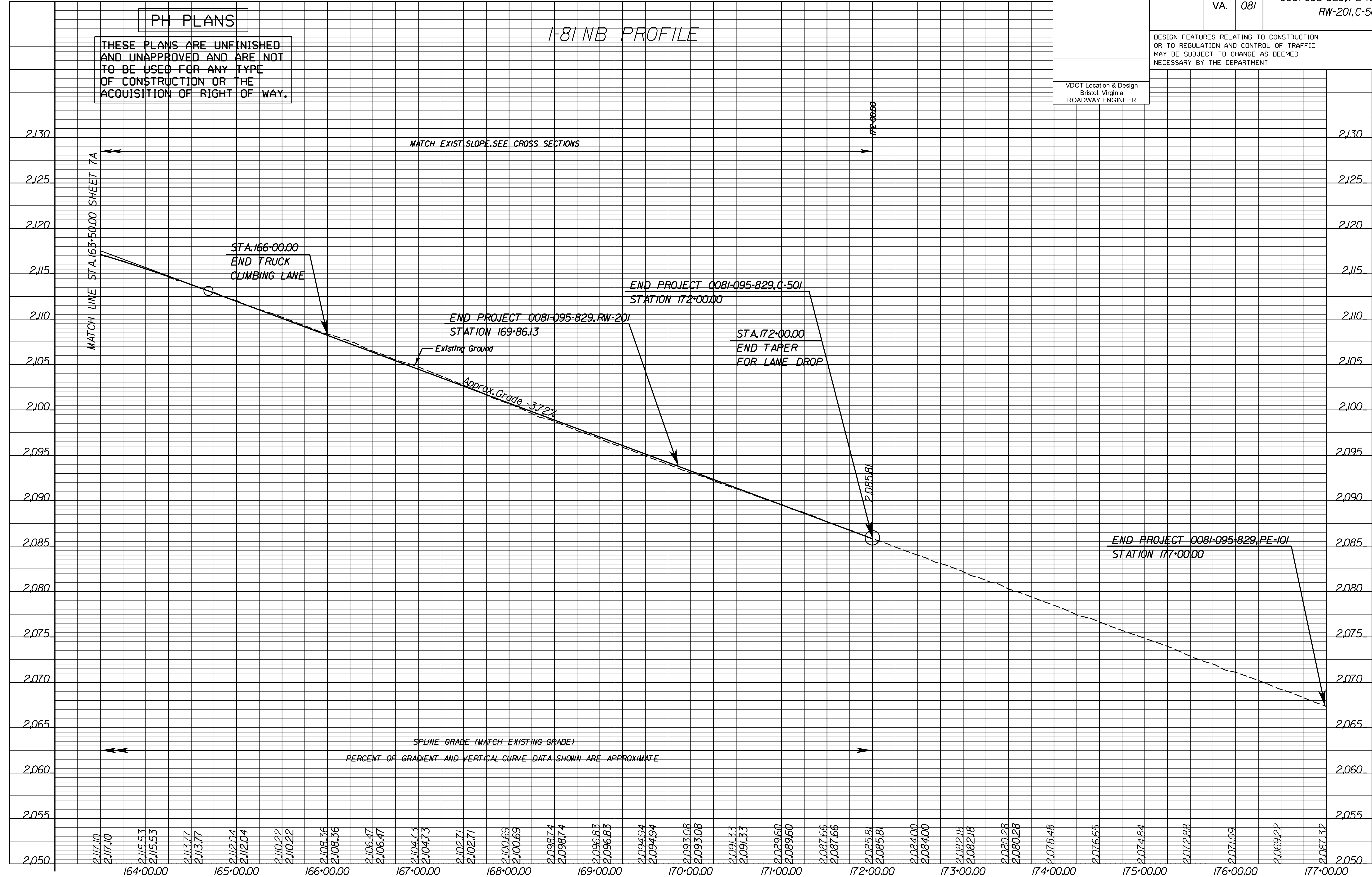
| REFERENCES  |        |
|---|--------|
| ( PROFILES, DETAIL & DRAINAGE DESCRIPTION SHEETS, ETC.) |        |
| Alignment Data  | IG     |
| Typical Section   | 2A(1)  |
| Profile 1-81 NB   | 8A     |
| E & S   | 8B, 8C |



PROJECT MANAGER James Jones, L.S., (276) 696-3257 (Bristol)  
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DESIGN BY Tamara Pritchard, P.E., (276) 696-3249 (Bristol)  
SUBSURFACE UTILITY BY, DATE

DESIGN FEATURES RELATING TO CONSTRUCTION OR TO REGULATION AND CONTROL OF TRAFFIC MAY BE SUBJECT TO CHANGE AS DEEMED NECESSARY BY THE DEPARTMENT

VDOT Location & Design  
Bristol, Virginia  
ROADWAY ENGINEER





PROJECT MANAGER James Jones, L.S. (276) 696-3257 (Bristol)  
SURVEYED BY, DATE Woolpert Inc., (757) 549-3549 (Nov. 24, 2019)  
DESIGN BY Tamara Pritchard, P.E. (276) 696-3249 (Bristol)  
SUBSURFACE UTILITY BY, DATE Woolpert Inc., (757) 549-3549 (Nov. 24, 2019)

# EROSION & SEDIMENT CONTROL PLAN PHASE I

## PH PLANS

THESE PLANS ARE UNFINISHED  
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ACQUISITION OF RIGHT OF WAY.

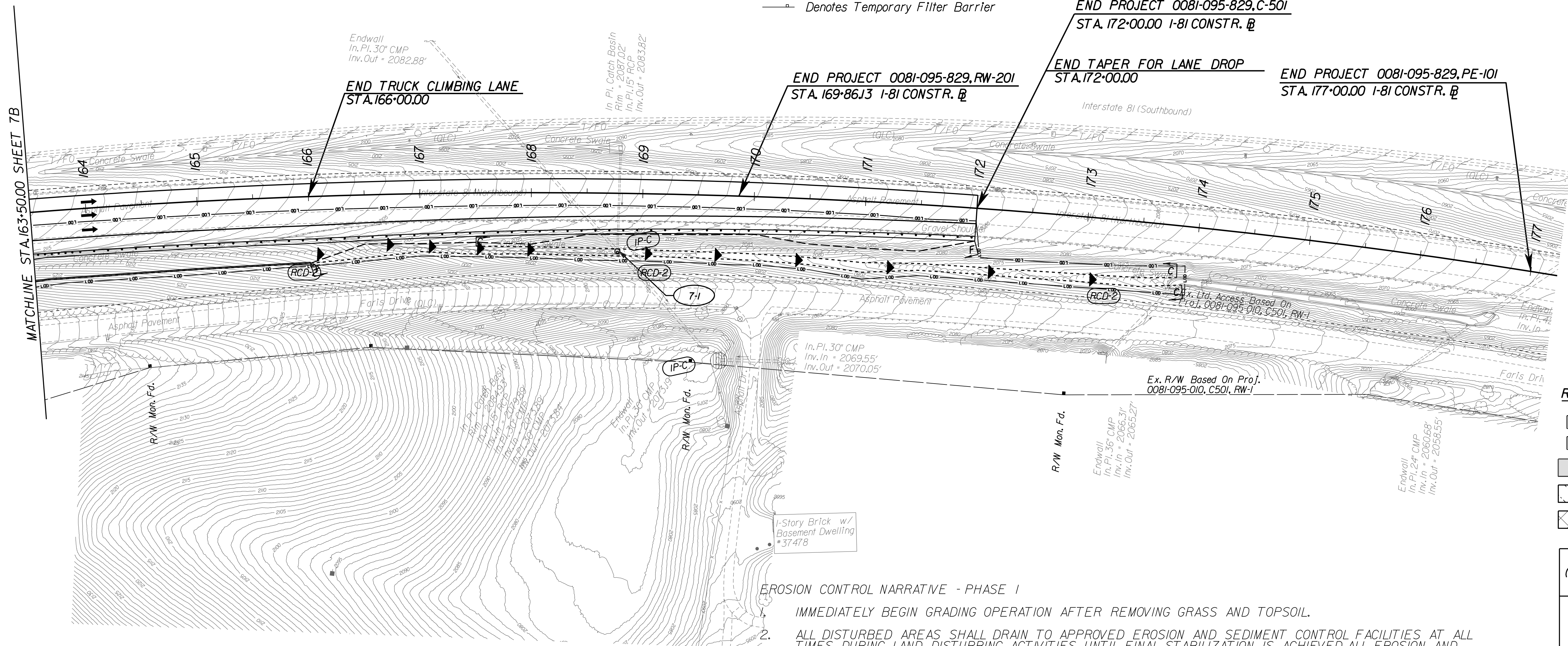
### HYDRAULICS LEGEND

- 3A Denotes Drainage Information
- Denotes Permanent Rock Check Dams, Ty. I
- Denotes Temporary Rock Check Dams, Ty. II
- (3-3) Denotes Drainage Structure
- Denotes Temporary Silt Fence
- Denotes Temporary Filter Barrier

Curve 181NB.6  
PI • 175+05.48  
DELTA • 25° 01' 21.20" (RT)  
D • 1'00' 00"  
T • 1271.40'  
L • 2502.26'  
R • 5729.58'  
PC • 162+34.08  
PT • 187+36.34  
V • 75 MPH  
E • MATCH EXIST.

### NOTES:

- R/W BASED ON CONSTRUCTION BASILINE  
UNLESS OTHERWISE NOTED.
- FIGURES IN DOUBLE BRACKETS AND DOT-DASHED  
LINES DENOTES PERMANENT EASEMENTS.
- REFERENCE PLAN SHEET 02 (GENERAL NOTES)  
FOR EROSION AND SEDIMENT CONTROL LEGEND.



### ROADWAY ITEMS LEGEND

- C CONSTRUCTION LIMITS IN CUTS
- F CONSTRUCTION LIMITS IN FILLS
- PROPOSED PAVEMENT
- PROPOSED FLEXIBLE PAVEMENT PLANING/OVERLAY
- DEMOLITION OF PAVEMENT

| REFERENCES<br>(PROFILES, DETAIL & DRAINAGE<br>DESCRIPTION SHEETS, ETC.) |     |
|---|-----|
| ROADWAY PLAN  | 08  |
| PROFILE 1-81  | 08A |
| ESC LEGEND  | 2   |

### EROSION CONTROL NARRATIVE - PHASE I

- IMMEDIATELY BEGIN GRADING OPERATION AFTER REMOVING GRASS AND TOPSOIL.
- ALL DISTURBED AREAS SHALL DRAIN TO APPROVED EROSION AND SEDIMENT CONTROL FACILITIES AT ALL TIMES DURING LAND DISTURBING ACTIVITIES UNTIL FINAL STABILIZATION IS ACHIEVED. ALL EROSION AND SEDIMENT CONTROL FACILITIES SHALL BE CONSTRUCTED AS A FIRST STEP IN ALL LAND DISTURBING ACTIVITIES AND SHALL BE MADE FUNCTIONAL BEFORE UPSLOPE LAND DISTURBANCE TAKES PLACE.
- INSTALL ROCK CHECK DAMS IN THE EXISTING DITCH LINE AND SILT FENCE ALONG THE TOE OF FILLS AS GRADING OPERATION PROCEEDS UPSTATION.
- DOWNSTREAM CONVEYANCES SHOULD BE PLACE AND STABILIZED BEFORE ANY TEMPORARY DIVERSIONS ARE CONSTRUCTED.
- THE CONTRACTOR SHALL INSPECT ALL EROSION AND SEDIMENT CONTROL FACILITIES PERIODICALLY AND AFTER EACH RUNOFF-PRODUCING RAINFALL EVENT. ANY NECESSARY REPAIRS OR CLEANUP TO MAINTAIN THE EFFECTIVENESS OF THE EROSION AND SEDIMENT CONTROL FACILITIES SHALL BE MADE IMMEDIATELY. RECORDS OF ALL INSPECTIONS AND REPAIRS MADE TO EROSION AND SEDIMENT CONTROL FACILITIES SHALL BE MAINTAINED BY THE CONTRACTOR.

SUGGESTED EROSION AND SEDIMENT  
CONTROL PLANS - PHASE I

| SCALE      | PROJECT      | SHEET NO. |
|------------|--------------|-----------|
| 0 50' 100' | 0081-095-829 | 8B        |



PROJECT MANAGER James Jones, L.S. (276) 696-3257 (Bristol)  
SURVEYED BY, DATE Woolpert Inc., (757) 549-3549 (Nov. 24, 2019)  
DESIGN BY Tamara Pritchard, P.E. (276) 696-3249 (Bristol)  
SUBSURFACE UTILITY BY, DATE Woolpert Inc., (757) 549-3549 (Nov. 24, 2019)

# EROSION & SEDIMENT CONTROL PLAN PHASE II

## PH PLANS

THESE PLANS ARE UNFINISHED  
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ACQUISITION OF RIGHT OF WAY.

Curve 181NB.6  
PI • 175+05.48  
DELTA • 25° 01' 21.20" (RT)  
D • 100' 00"  
T • 1271.40'  
L • 2502.26'  
R • 5729.58'  
PC • 162+34.08  
PT • 187+36.34  
V • 75 MPH  
E • MATCH EXIST.

### HYDRAULICS LEGEND

- 3A Denotes Drainage Information
- Denotes Permanent Rock Check Dams, Ty. I
- Denotes Temporary Rock Check Dams, Ty. II
- 3-3 Denotes Drainage Structure
- Denotes Temporary Silt Fence
- Denotes Temporary Filter Barrier

### NOTES:

- R/W BASED ON CONSTRUCTION BASELINE UNLESS OTHERWISE NOTED.
- FIGURES IN DOUBLE BRACKETS AND DOT-DASHED LINES DENOTES PERMANENT EASEMENTS.
- REFERENCE PLAN SHEET 02 (GENERAL NOTES) FOR EROSION AND SEDIMENT CONTROL LEGEND.

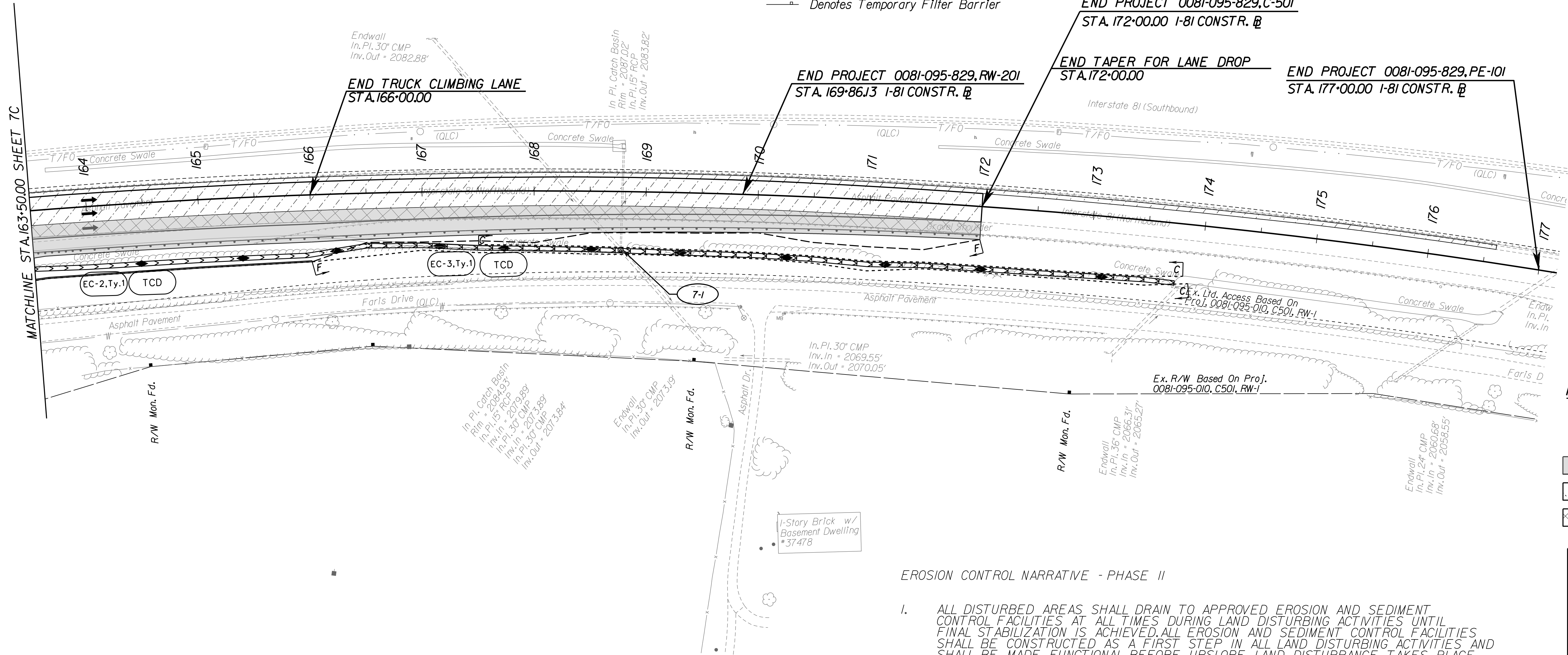
END PROJECT 0081-095-829, C-50I  
STA. 172+00.00 I-8I CONSTR. R

END TAPER FOR LANE DROP  
STA. 172+00.00

END PROJECT 0081-095-829, PE-10I  
STA. 177+00.00 I-8I CONSTR. R

END PROJECT 0081-095-829, RW-20I  
STA. 169+86.13 I-8I CONSTR. R

END TRUCK CLIMBING LANE  
STA. 166+00.00



### ROADWAY ITEMS LEGEND

- CONSTRUCTION LIMITS IN CUTS
- CONSTRUCTION LIMITS IN FILLS
- PROPOSED PAVEMENT
- PROPOSED FLEXIBLE PAVEMENT PLANING/OVERLAY
- DEMOLITION OF PAVEMENT

| REFERENCES<br>(PROFILES, DETAIL & DRAINAGE<br>DESCRIPTION SHEETS, ETC.) |     |
|---|-----|
| ROADWAY PLAN  | 08  |
| PROFILE I-8I  | 08A |
| ESC LEGEND  | 2   |

### EROSION CONTROL NARRATIVE - PHASE II

- ALL DISTURBED AREAS SHALL DRAIN TO APPROVED EROSION AND SEDIMENT CONTROL FACILITIES AT ALL TIMES DURING LAND DISTURBING ACTIVITIES UNTIL FINAL STABILIZATION IS ACHIEVED. ALL EROSION AND SEDIMENT CONTROL FACILITIES SHALL BE CONSTRUCTED AS A FIRST STEP IN ALL LAND DISTURBING ACTIVITIES AND SHALL BE MADE FUNCTIONAL BEFORE UPSLOPE LAND DISTURBANCE TAKES PLACE.
- INSTALL ROCK CHECK DAMS IN THE EXISTING DITCH LINE AND SILT FENCE ALONG THE TOE OF FILLS AS GRADING OPERATION PROCEEDS UPSTATION.
- DOWNSLOPE CONVEYANCES SHOULD BE PLACED AND STABILIZED BEFORE ANY TEMPORARY DIVERSIONS ARE CONSTRUCTED.
- THE CONTRACTOR SHALL INSPECT ALL EROSION AND SEDIMENT CONTROL FACILITIES PERIODICALLY AND AFTER EACH RUNOFF-PRODUCING RAINFALL EVENT. ANY NECESSARY REPAIRS OR CLEANUP TO MAINTAIN THE EFFECTIVENESS OF THE EROSION AND SEDIMENT CONTROL FACILITIES SHALL BE MADE IMMEDIATELY. RECORDS OF ALL INSPECTIONS AND REPAIRS MADE TO EROSION AND SEDIMENT CONTROL FACILITIES SHALL BE MAINTAINED BY THE CONTRACTOR.

SUGGESTED EROSION AND SEDIMENT  
CONTROL PLANS - PHASE II

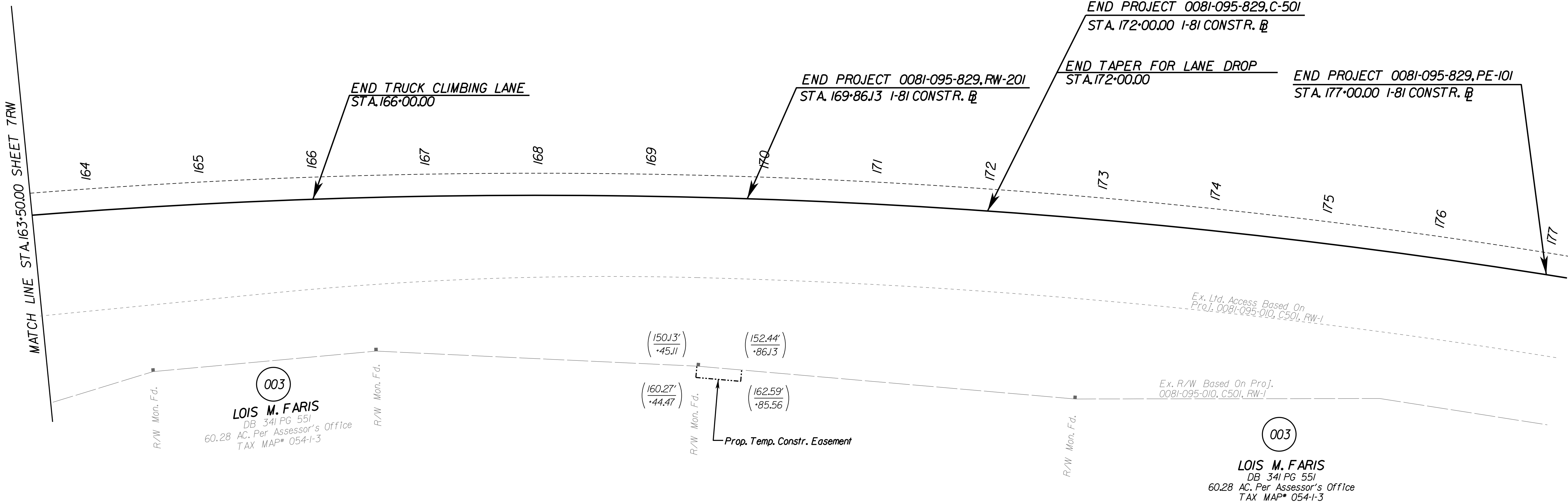


PROJECT MANAGER James Jones, L.S., (276) 696-3257 (Bristol)  
SURVEYED BY, DATE Woolpert Inc., (757) 549-3549 (Nov. 24, 2019)  
DESIGN BY Tamara Pritchard, P.E., (276) 696-3249 (Bristol)  
SUBSURFACE UTILITY BY, DATE Woolpert Inc., (757) 549-3549 (Nov. 24, 2019)

PH PLANS

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ACQUISITION OF RIGHT OF WAY.

Curve 181NB.6  
PI • 175+05.48  
DELTA • 25° 01' 21.20" (RT)  
D • 1'00' 00"  
T • 1271.40'  
L • 2502.26'  
R • 5729.58'  
PC • 162+34.08  
PT • 187+36.34  
V • 75 MPH  
E • MATCH EXIST.



NOTES:

THIS RIGHT OF WAY SHEET REPRESENTS A FIELD RUN PERIMETER SURVEY OF THE PROPOSED R/W LIMITS. ALL OTHER ADJOINING/DEPARTING BOUNDARY LINES SHOWN ARE COMPILED FROM VARIOUS SOURCES: FOUND FIELD MONUMENTATION, METES AND BOUNDS DESCRIPTIONS, AND RECORDED PLATS. THE ADJOINING LINES DO NOT REPRESENT A FIELD RUN SURVEY OF THE ADJOINING PROPERTIES AND ARE BEST FIT BASED ON COMPILED DATA. ALL AREAS SHOWN FOR R/W TAKES AND EASEMENTS ARE APPROXIMATE ONLY.

THIS SURVEY DATUM IS BASED ON VDOT PROJECT 0081-095-829, RW20I, C50I UPC:116156

RIGHT OF WAY MONUMENTATION TO BE SET UPON COMPLETION OF CONSTRUCTION.

NO CEMETERY SITES WERE OBSERVED OF THE SUBJECT PROPERTY. THIS DOES NOT PRECLUDE THEIR EXISTENCE.

ALL PROPOSED RIGHT-OF-WAY MONUMENTATION OFFSET/STATIONS AND PROPOSED EASEMENT OFFSET/STATIONS SHOWN HEREON ARE BASED OFF OF THE I-81 NB BASELINE.

LEGEND

○ PROPOSED R/W MONUMENT

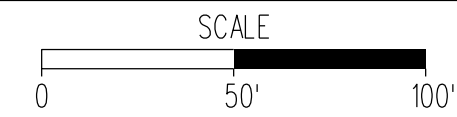
00.00' ±00.00' FIGURES AND CONTINUOUS LINES DENOTE PROPOSED RIGHT OF WAY AND LIMITED ACCESS LINES.

00.00' ±00.00' FIGURES IN PARENTHESES AND DASH-DOT-DOT LINES DENOTE PROPOSED TEMPORARY CONSTRUCTION EASEMENTS.

00.00' ±00.00' FIGURES IN DOUBLE BRACKETS AND DOT-DASHED LINES DENOTE PERMANENT DRAINAGE EASEMENTS.

| Element | Direction | Distance | Length | Radius |
|---------|-----------|----------|--------|--------|
|         |           |          |        |        |
|         |           |          |        |        |
|         |           |          |        |        |
|         |           |          |        |        |

| APPROXIMATE AREA TABLE |          |               |                         |                             |
|------------------------|----------|---------------|-------------------------|-----------------------------|
| PARCEL #               | R/W TAKE | FEE REMAINDER | PERM. DRAINAGE EASEMENT | TEMP. CONSTRUCTION EASEMENT |
| 003                    |          | 60.28 AC      |                         | 407 SF                      |



PROJECT  
0081-095-829

SHEET NO.  
8RW